Executive Function Skills:
Principles in Education

Presented by

Sarah Ward, M.S., CCC/SLP
Speech and Language Pathologist

Faculty
Department of Communication Sciences and Disorders
School of Health and Rehabilitation Sciences
MGH Institute of Health Professions
Boston, MA

The Center for Executive Function Skill Development   www.executivefunctiontherapy.com

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Who is a Successful Graduate?
Components of Time Management*

1. Setting and Prioritizing short and long term goals
   – Breaking down tasks
   – Reviewing goals and activities
   – Setting priorities and deadlines
   – Being efficient
   – Evaluating schedules and completing priorities
   – Using wait time and avoiding interruptions

*From <u>Fostering Independent Learning</u> by Virginia Smith Harvey and Louise Chickie Wolfe

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Components of Time Management*

2. Planning and Scheduling
   – Making lists of tasks to complete
   – Making schedules
   – Carrying an appt book
   – Writing reminder notes and lists
   – Keeping daily logs
   – Preparing for the next day the night before
   – Organizing paperwork and having a clean workspace

*From <u>Fostering Independent Learning</u> by Virginia Smith Harvey and Louise Chickie Wolfe

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Components of Time Management*

3. Preferring Organization
   – Not being disorganized
   – Not preferring messy workspaces/places
   – Preplanning and prioritizing tasks

*From <u>Fostering Independent Learning</u> by Virginia Smith Harvey and Louise Chickie Wolfe

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Components of Time Management*

4. Perceiving and Gaining Control Over Time
   – Not feeling overwhelmed by tasks
   – Not fixating on small details
   – Not agreeing to too many tasks and saying no
   – Accurately estimating time
   – Keeping a schedule
   – Avoiding excessive socializing
   – Keeping sight of goals
   – Thinking before acting
   – Being unlikely to procrastinate

*From <u>Fostering Independent Learning</u> by Virginia Smith Harvey and Louise Chickie Wolfe

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Components of Time Management*

Most important is to feel in control of time

Setting and prioritizing tasks, planning and scheduling and organizing are *methods* to increase time control

   – And these are only effective in gaining control over time when they are actually implemented!

*From <u>Fostering Independent Learning</u> by Virginia Smith Harvey and Louise Chickie Wolfe

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Know The Game:

Executive Function Skills?

3 Layers of Executive Function Skills

- Self Regulation

- Organization and Integration of Information

- Higher Order Reasoning Skills

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3 Primary Layers of Executive Functions

1. Self – Regulation
   Basic needs are met
   Awareness
   Motivation
   Initiation
   Emotional control
   - Emotional balance
   - Self awareness
   - Self monitor

3 Primary Layers of Executive Functions

2. Organization/Integration
   - Integrate details into a bigger picture
   - Organize and store information so it can be traced back and retrieved over time

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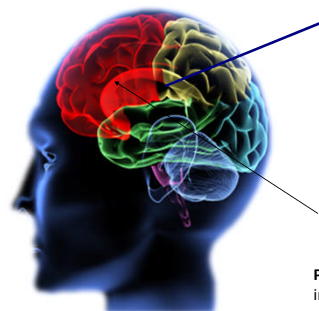## 3 Primary Layers of Executive Functions

3. Higher Order Reasoning Skills
   - Analyze
   - Draw a conclusion
   - Solve a problem
   - Predict an outcome
   - Reason
   - Evaluate

The Subcortex

- **Basic Drives**:
  - Hunger/Thirst
  - Sleep/Wake
  - Sexual
- **Emotion**
- **Memory**
- **Time**
  - Chemical Control of Pace
  - Bio-Rhythm
  - "sensation" of time passing

Prefrontal lobe – planning, initiation, anticipation, impulse control – higher order thinking

The Subcortex – Low Road Processing

Low Road Processing Involves **the shutting down** of the higher processes of the mind.

It Leaves the individual in a state of:

| Intense Emotions | Impulsive | Rigid Responses | Lacking in Self Reflection | Unable to Consider Another Point of View |

The Frontal Lobe - High Road Processing

A Form of Processing that involves:

• **Higher**

• **Rational**

• **Reflective thought processes of the mind**

High Road Processing Allows for:

| Being Mindful, Interactive, Emotive | Being flexible in our responses | An Integrated Sense of Self Awareness |

'Executive Functions' Flowchart:

Relaxed State of Mental Alertness → **STOP** **And Have** **Awareness** →

Being Aware

| Specific Time of Day After | Time Involved, Order, Feel for Time |

T

- **space** – in my own home, upstairs, bathroom, bedroom
- **time** – 7;30, after Dora
  - **sequence** – bath before pajamas
- **objects** – pajamas, toothbrush, washcloth, etc.
- **people** – need dad to read a story, need mom to brush out my hair

- **space** – in the kitchen
- **time** – prep time, cooking time, clean up time
  - **sequence** – check ingredients before mixing
- **Objects** – recipe, ingredients, utensils, dishes
- **people** – help turning on the stove

Being Aware

Under What Condition →

Cleaning Routine:

- **Space**

  Time – Before you leave the house, before guests come, after a mess, to have a clear mind, before the cleaners come

  – **Sequence** – items off the floor, make the bed, maybe vacuum and dust

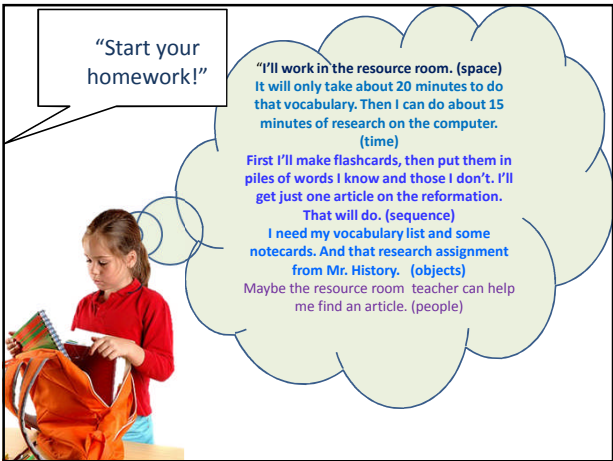- **Objects** – trash bag, laundry basket, vacuum, duster

- **People** – mom

"Clean your room…….."

"Let's see.
I need to go to my room and clean. (space)
It will only take about 10 minutes. Then I can go over to Andrea's. (time)
First I'll pick up the cd's, then the dirty clothes and put away my books. That will do. (sequence)
I need a trash bag. (objects)
Maybe Mom can bring me my clean clothes. (people)

Slide 1:

"Start your homework!"

"I'll work in the resource room. (space)
It will only take about 20 minutes to do that vocabulary. Then I can do about 15 minutes of research on the computer. (time)
First I'll make flashcards, then put them in piles of words I know and those I don't. I'll get just one article on the reformation. That will do. (sequence)
I need my vocabulary list and some notecards. And that research assignment from Mr. History. (objects)
Maybe the resource room teacher can help me find an article. (people)
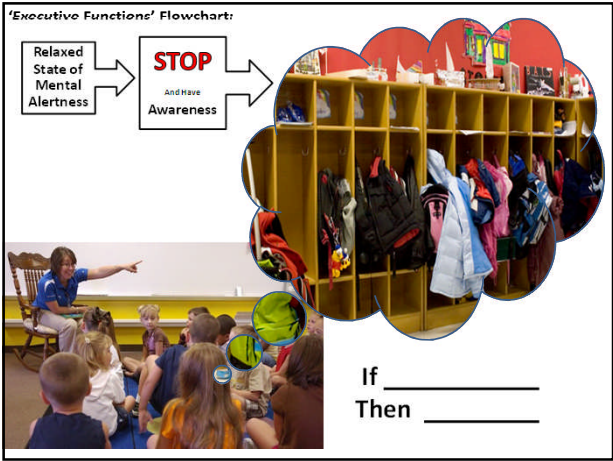
Slide 2:

STOP and Read the Room

Space	**T**ime	**O**rganization	**P**eople
Read the Room	Get on the Timeline	Sense the Organization	Read the Person
What's going on?	Time of day (routine vs. non-routine)	How are things Organized?	Face Body Appearance Mood Pace Saying
	What is happening at this Moment in Time	We Consider the basis for Organization:	
	What is coming up? *Predictable sequence	**Objects** Location Purpose Whole-->Part	
	Pace		

Slide 3:

'Executive Functions' Flowchart:

Relaxed State of Mental Alertness → STOP And Have Awareness →
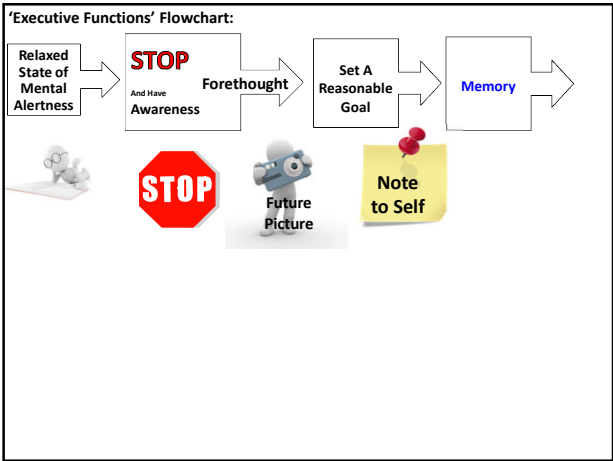
If _____
Then _____

Slide 4:

Summary:

- Awareness is the ability to respond to important informational cues about space, time, objects and people.

- Enables a student to integrate these details with prior knowledge and **shift** to the big picture to understand the gestalt of 'now' and 'next'.

- Creates a mental screenplay of 'How' to do something so a student can then self direct or execute in an 'online' fashion.
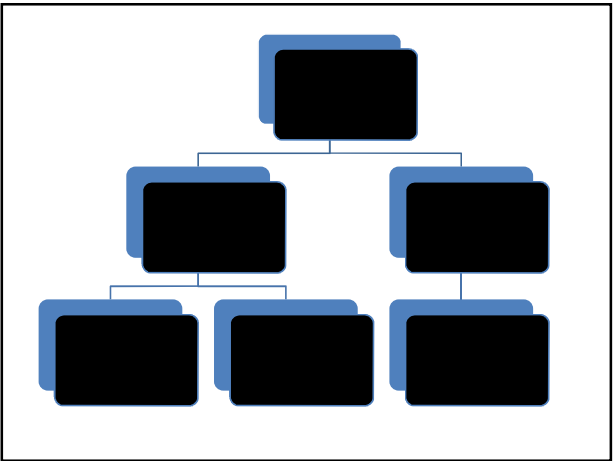
Anticipate the Outcome!

Slide 5:

'Executive Functions' Flowchart:

Relaxed State of Mental Alertness → STOP And Have Awareness → Forethought → Set A Reasonable Goal → Memory →

STOP
Future Picture
Note to Self

Slide 6:
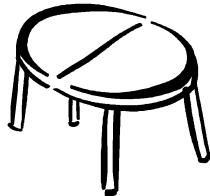
[flowchart diagram with black boxes]

Semantic Memory

Concerned with concepts, meanings and ideas
not related to personal experience

Concept of a table: an
article of furniture
consisting of a flat, slab
like top supported on
one or more legs or
other supports

Absolute Processing*

- **Factual**
  - Information always has the same meaning.
  - Example: STOP sign means stop.
- Answers are **absolute**. They right or wrong and never change.
  - Example: 30 minutes + 30 minutes = 1 hour
- Events take place in the same manner, day after day.
  - Example: The sun always rises in the east and sets in the west.

* Relationship Development Intervention. Dr. Steve Gutstein
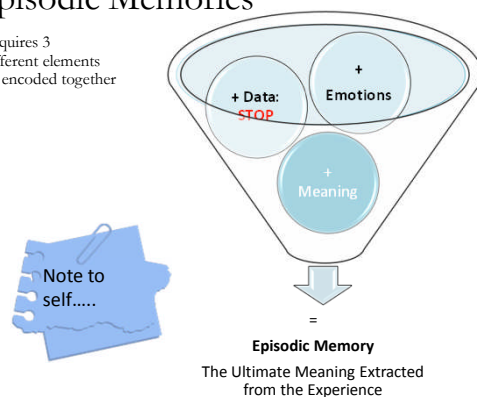
Episodic Memory

Can be explicitly described and stated
Describing one's kitchen table

Episodic Memories

Requires 3
different elements
be encoded together

Note to self…..

=
Episodic Memory
The Ultimate Meaning Extracted
from the Experience

Strong Episodic Memory Skills Allow You To:

- Remember the key features of an experience and translate those features into future, novel experiences and to develop future goals
- Encode information as a whole
- Remember the big picture
- Review
  - The benefits of hard work
  - Past decisions
    - what worked
    - what did not work
  - Situations to avoid making future mistakes
- Realistically appraise the passage of time
- Be realistic about my strengths and limitations
- Recognize when something is new and when you should be an expert
- Use experiences to empathize with another person

1 Relationship Development Intervention. Dr. Steve Gutstein

Relative Processing

- The meaningfulness of information depends on the **context** in which it is imbedded (ex. Person, place, time).
  - Example: It is ok to hug your Aunt goodbye, but you can't hug the UPS man goodbye.

- Many problems require a "**good enough**" solution. We arrive at the solution based on whether or not it feels right, not because of objective criteria.
  - Example: Determining how close to stand to a person when talking with them.

- Problems may not have a single right or wrong **solution**.
  - Example: Which shirt should I wear? Which book is my favorite? Which snack should I eat? How should I play with my legos?

Relationship Development Intervention (RDI)
This paper was written by: Amy Cameron, MA, CCC-Sp
From notes taken at Dr. Gutstein's 2-day workshop August 2003

Typical Development

Typically developing people follow a pattern of learning that allows for a sophisticated ability to relate to others. Typical children learn to process information in two different ways: **Absolute and Relative**.

Absolute Processing

1. Solutions are either right or wrong. Correct solutions never change. Example: 2+2=4 2+2 never = 5
2. Events take place in the same manner, day after day. Example: The sun always rises in the east and sets in the west.
3. Information always has the same meaning. Example: A red light means stop. A green light means go.

Relative Processing

1. The meaningfulness of information depends on the context in which it is imbedded (ex. Person, place, time). Example: It is ok to tickle a baby if it is your brother, but not if it is a stranger.
2. Many problems require a "good enough" solution. We arrive at the solution based on whether or not it feels right, not because of objective criteria. Example: Determining how close to stand to a person when talking with them.
3. Problems may not have a single right or wrong solution. Example: Which shirt should I wear? Which airline should I fly? Which road should I drive to work? How should I play with my blocks?

Relative processing is required in order to relate socially. It is required for flexibility in problem solving, understanding meaning based upon context, adapting actions based upon feedback, and conversation, as well as many other functions to survive on a daily basis. Relative processing skills are weak in those with Autism, creating constant dilemmas in their daily lives. Many "social skills" programs emphasize capitalizing on Absolute processing in order to help improve social ability. These skills may be helpful in certain situations at certain times, but are not fluid enough to fit into the real world. (Ex. Eye contact, scripted greetings, etc.)

Typical Memory

Typically developing memory involves different mechanisms served by separate brain circuits. Two types of memory are: **Procedural memory and Episodic memory**. These two types of memory activate two different neural pathways.

Procedural Memory

- encodes details leading to specific goals
- procedures, scripts, and formulas
- emotional information is not stored

Examples of procedural memory

- memorizing facts for a test
- scripts for specific scenarios (ordering at McDonald's)
- saying "please" and "thank you"

Episodic Memory

- encodes information as a whole
- remembers the big picture, only certain details that are meaningful to us
- information stored as "episodes" with specific emotions attached to organize different categories

Examples of episodic memory

- recalling a trip
- remembering a visit to Grandma's house
- remembering a holiday

Instrumental Interaction and Experience Sharing

People with Autism tend to rely much more strongly upon procedural memory. The reason may lie in the way their brains are organized. We are born with many more brain connections than we can use. In childhood our brains selectively "prune" connections that are not stimulated. Specific neural pathways are stimulated based on different ways that we interact with our environment. Two different ways we interact with our environment are: **Instrumental Interaction and Experience Sharing**. These two different types of interaction activate two different neural pathways.

Instrumental Interaction

- social contact is a means to an end
- we expect scripted actions will lead to specific outcomes
- emotional reactions are not important
- novelty and creativity are disruptive

Examples of Instrumental Interactions

- pointing to a toy that is out of reach
- standing in line at a supermarket to pay for your stuff
- going to visit a "friend" so you can play with his new playstation game

Experience Sharing

- the interaction is an end in itself
- we prefer to interact not knowing the outcome
- emotions are the critical information
- we interact to share novel and creative ideas

Examples of Experience Sharing:

- going fishing with a friend not caring whether or not you actually catch any fish
- riding bikes side by side with a friend going no place in particular
- while out shopping noticing something you daughter would like and buying it for her

People on the Autism spectrum tend to be really good at instrumental interactions, but not with experience sharing.

Two Different Pathways

1. Absolute Thinking => Procedural Memory => Instrumental Interaction
2. Relative Thinking => Episodic Memory => Experience Sharing

People with Autism tend to be very good at pathway #1 and tend to have extreme deficits with pathway #2. RDI specifically addresses pathway #2 beginning with experience sharing, and then creating episodic memories to improve relative thinking.

Principles of RDI

1. Carefully and systematically build motivations. Motivations are the same as functions, the "why". Experience sharing can become addictive for people with Autism. RDI emphasizes the teaching of functions before skills.
   - functions are the "why bother" of doing experience sharing
   - functions must be mastered before skills
   - functions are developed through Episodic Memories

   Skills:

   - skills are the "how to" of experience sharing
   - skills never determine the starting place for intervention
   - skills are attached to episodic memories developed through functions
2. Carefully evaluate developmental readiness before teaching skills. The foundation must be solid before you add skills.
3. Learn to be an Experience Sharing Coach by balancing guiding and pacing. Follow the child's lead not in what to do, but in how fast to do it.
4. Invite and amplify using prompts and spotlighting. Use you face, voice and body to insure that critical information stands out clearly.
5. Make sure to build Episodic Memories of enjoyable shared experiences.
   - celebrations (instead of praise)
   - stop the action
   - videotape review
   - photographs
   - memory books
   - emotional comparisons
   - journaling
6. Use expandable, evolving Frameworks, not rigid activities, to develop Experience Sharing. FRAMEWORKS are activity structures designed to be gradually modified and expanded. The framework is never the central focus, it is only scaffolding for interaction.
7. Expect to make many mistakes leading to new discoveries. RDI is a continuous process of hypothesis testing.
8. Make sure to develop Experience Sharing language. (ex. We can do it! Did you see that? Is that better? Do you like it?)
9. Incorporate RDI communication and referencing and regulation into your daily life.
10. Start with Adults, to dyads, then groups. Typical children learn to be competent with adult partners before desiring time with peers. Children's first peer encounters are with one peer at a time. Groups are much more difficult that dyads.

Slide 1

Emotion: Choose 2

Happy   Impatient
Angry   Lonely
Sad   Sympathetic
Afraid   Ashamed
Jealous   Frustrated
Embarrassed   Worried
Surprised   relieved
Disappointed
Proud

If _____
Then _____

Note to self.....

When Emotions are too Big

Facts

+
Emotion

=

Note to Self: The Emotion is Remembered

When the Focus is on the Facts

Emotion

Facts

=

Note to Self: Facts about the situation are remembered when sometimes we want the student to have emotion as a motivating factor

From Experiences to Semantic Memory

- Encyclopedia
- Text Book
- Cook Book, Wii Manual, Game Instructions
- Target
- Grocery Store
- Baseball Game
- Mall
- Birthday Party

Category to Subcategory to Details

Semantic Memories: Memories from Experiences or Episodes that are stacked together to form a concept

Schema: Party

Features	Details
Decorations	Red and White balloons, Streamers, Party Plates & Cups, Centerpiece
Food	'Strawberry Shortcake Character' Cake with Candles, Juice Boxes, Goldfish
Games	Piñata, Pin the Tail on the Donkey, Musical Chairs
Guests	Girls in Party Dresses
Presents	A Barbie, a new Puzzle, Pretty Hair Barrettes, Beads
Treats	A goody Bag!

Script:
1. Games
2. Food
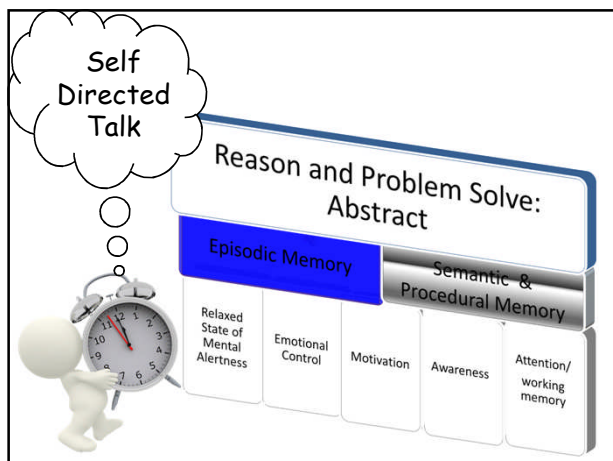3. Presents
4. Treats

Research Project

- Finding Articles
  - Primary and Secondary sources
    - Text, internet, journals, books
  - Document Sources
- Organizing Research
  - Graphic Organizers
    - What type of writing am I doing?
- Writing
  - Style of writing, How to Write a Thesis and multi-paragraph essay
  - Who is my audience
- Time
  - Research (days), outline/organize(1-2 days), write(2-3 days), edit (day), revise, edit (1-2 days)
- People
  - Dad is helpful, my teachers will edit and support me in thesis idea, Mom is good at editing

Slide 1: 'Executive Functions' Flowchart

'Executive Functions' Flowchart:

Relaxed State of Mental Alertness → STOP And Have Awareness / Forethought → Future Picture → Set A Reasonable Goal → Tap into knowledge base and Notes to Self (Episodic Memory)

STOP

Self Talk- Internal Speech

Steps of the Plan to Meet the Goal

If things are not going as planned, then you need to:
a. Evaluate why and plan
b. Generate several alternative solutions

Self Monitor and Evaluate
a. is the plan being successfully implemented?
b. Is the goal in fact achieved?

Inhibit (Stop) ← Initiate (Start)

Passage of Time

Slide 2: Working definition of EF skills

Working definition of EF skills

Executive Function is the ability to
integrate a present **awareness**
with a **future anticipation** and **prior experiences**
to achieve a reasonable **goal & plan**
(while still accounting for and
flexibly managing and organizing
the **space, time, objects** and **people around you**)
.

Slide 3: Self Directed Talk

Self Directed Talk

Reason and Problem Solve: Abstract

Episodic Memory   Semantic & Procedural Memory

Relaxed State of Mental Alertness | Emotional Control | Motivation | Awareness | Attention/ working memory

Slide 4: Observations: EF Difficulties in the Classroom

Observations: EF Difficulties in the Classroom

"Can talk the talk but can not walk the walk"

- Requires frequent feedback to complete tasks
- Inconsistent Effort and Performances
- May perform well on quizzes and short tests, but less well on homework
- Looks Unmotivated and/or Stressed
- Unprepared for Class or Assignments
- Rigid and Inflexible Thinking

Slide 5: The Hierarchy of Task Execution

The Hierarchy of Task Execution

| |
|---|
| Is the Student Aware? Are they Reading the Room? |
| Do they have a Future Picture? |
| Do they Know and Sense the Passage of Time? |
| Are the Key Features Organized in their Mind? (Big Picture ☐Features ☐Details) |
| Have they accessed any Notes to Self? Do they recall last Time how Things Worked Out? |
| Do they have a Plan for managing the steps, the time and the materials? |
| How do they initiate best? |

Slide 6: Summary of the Rules of the EF Game

Summary of the Rules of the EF Game

- Relaxed Alertness
- "If….then" Future Picture Thinking
- Same but Different
- Show the Sweep of Time
- Do Students Know the "How to"
- Teach Organization:
  - Big Picture--> **Features** --> Details

A Team Approach to Therapy
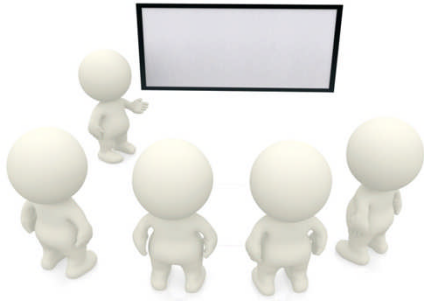
Organizing the Classroom
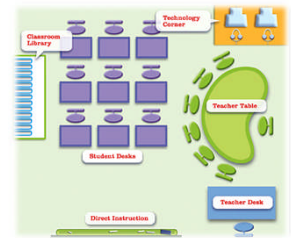
Setting Up the Classroom
to Support Task Execution

- Section Classroom into Zones

- Identify the Function of the Zones

- State the Process for Each Zone

Classroom Zones

Strategy Zone | Home-work Zone | Teaching Zone

Homework Zone

- Separate Homework Board

- File Box for Homework Folders

- New Homework Box for New Worksheets

Homework Zone

Tonight's Assignment: Wednesday, Nov 19

English:
    Assignment: Math Worksheet - 6 problems
    Materials: Worksheet/ Notes from Class
    Due   Tuesday
    Strategy: Multiplication chart
    Purpose: Practice What you Have Learned

To Turn In | New Homework

Homework Folder

Create Homework Folders

– One side to turn in homework

– One side for picking up homework

• Make a choice with this
– File it away?
– Leave on my desk for class discussion?
– Do I want to ask the teacher a question about it?

Turn In   Pick Up
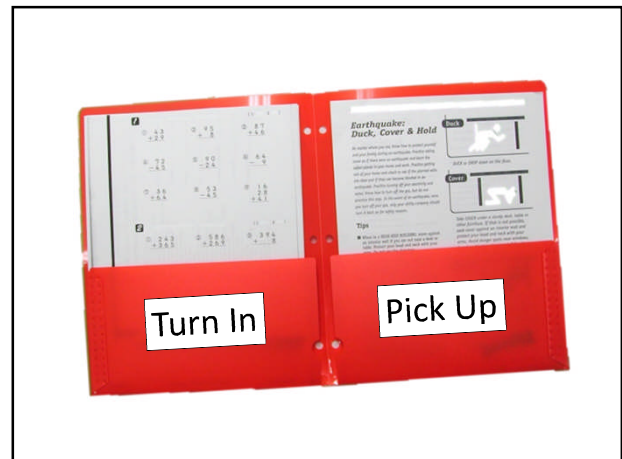
Inside of Homework Folder

o How will I know where to put my assignment?

o If I file the paper, then which Notebook?

o If I need the paper for class, then where do I see it?

o If I want to ask the teacher a question about the work I did or the grade I received, then where will I keep this paper until I can ask?

Increasing Independence of Homework

Tonight's Assignment: Wednesday, Nov 19

English:
Assignment: Math Worksheet - 6 problems
Materials: Worksheet/ Notes from Class
Due   Tuesday
Strategy: Multiplication chart
Purpose: Practice What you Have Learned

Create a Context for Homework

"Key Purposes of Homework"

– Prepare For Tomorrows Lesson

– Practice A Procedure

– Refine A Skill

– Apply Facts You Learned

– Build Speed And Accuracy

– Show what you have learned in a creative way!

– Express Knowledge In A New Form

Homework Cover Sheets

☐ Name
☐ Date
☐ Estimated Time: _____
☐ Actual Time: _____
☐ Strategy I used to help me complete:
_____
☐ I checked my work over
☐ I found and circled an answer I liked or am proud of
☐ I'll place my homework in my backpack in a place where I will remember to turn it in tomorrow. Ill be turning this in at about what time? _____

There is always a question in regards to modifying assignments so that students are not overwhelmed and as a means of accommodating speed of processing based difficulties. There are times modifying assignments is very appropriate. To help in determining which assignments to modify I highly recommend considering the primary purposes of homework:

Purpose of Homework	Example	Possible Modifications
To Practice a Procedure	The students have learned a new formula in physics. The homework is doing introductory practice problems.	Because the task is new and speed of processing and organization skills will be taxed. Reduce assignment to a select number of problems that really tap his practicing the formula.
Refine a Skill	The students have been exposed to several lectures and a lab using aformula in physics. The purpose of the homework is to make the student really learn the little tips and tricks and possible obstacles/'things to look out for" to solving problems problems.	Have the student do less problems but create a cheat sheet of tips, tricks, obstacles and 'things to look out for'.
Prepare for tomorrows lesson	Read a chapter and answer questions to be prepared for tomorrow's lesson.	The student should be responsible for this because there is less pressure of grading. If modification is necessary….have the student highlight the title, subtitles, headlines, key words to ascertain the overall organizational structure of the material to be previewed.
Apply creative thinking	The student has a list of vocabulary words and needs to create a story using those words.	Since the purpose is to be creative, modify the 'creative' product. Maybe the student can create a powerpoint, website page, blog or podcast.
Build Speed and Accuracy	The student needs to be able to quickly and efficiently work through math problems which he has been practicing all week.	No modifications. Use previous cheat sheets and practice opportunities to bring the skill to mastery.
Express Knowledge in a New Form	The class has been learning about Greek Philosophy. The student needs to express this knowledge in a different form – such as carrying out a philosophical discussion while dressed up as a philosopher.	This should be an area of interest to the student and modifications should only be to tweak the assignment to meet his technology strengths and personal creative interests.

Teaching Zone/s

1. Central Teaching Zone (May be the Whiteboard)

    – Post Transitions
      • State expectations of students during:
        – the transition before class starts
        – the period of time before their next class or activity

    – Post the Agenda
      • Provide an analog visual of the class agenda and a linear list

2. Have students label the names of the other Teaching Zones:
    – Ex: Calendar Zone; Class Meeting Zone; Information Zone

Posting Classroom Routines:

Transition
Take out your Homework
Get a pencil and your calculator ready
Have your text book out
Take a seat and get ready for a fun lab!

Agenda

Turn in the old Homework; Pick up New Assignment
1. Review Electrons and protons
2. H2O Lab
3. Quiz Review

Transition
Put your calculator and pencil in your desk.
Take your text book home with you. Stand quietly by the door.
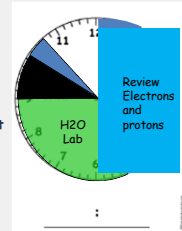
Strategy Zone

• Strategy Board
    – Strategy of the Week (Thinking Maps)
    – Task Specific Strategies (Tree Map)

• Student Strategy Notebooks

• Master Strategy Notebooks

• Bin for New Strategy Pages to be Put in the Student Strategy Notebook

Strategy of the Week: Turtle Calm *

New Strategy Pages

Master Strategy Notebook
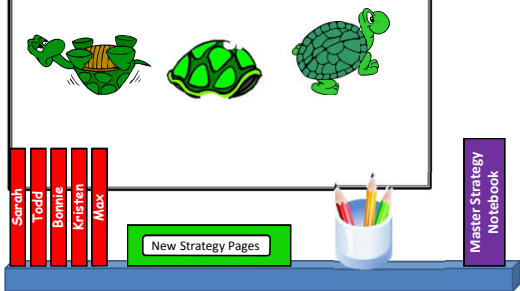
* Lynn Meltzner, Promoting Executive Skills in the Classroom

How to Effectively Use Visuals for Other Zones

• Visualize Specific Areas or Tasks:
    –   Cubbies, lockers, reference areas, science lab setup

• Have the students take photos of these areas as needed

Planner

Book/s

Worksheet or Handout

Supplies
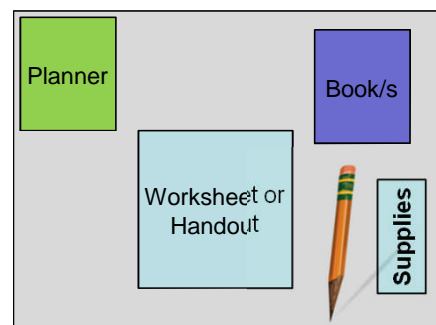
Basic Science Lab Set Up

Managing Time

Get on the Timeline

- **What Does Time Involve? Developmentally:**
  - Sequencing Facts
    - Before, During, After
    - Present Time
    - Regular Occurrence, Personal Experience
    - Sequence of simple then complex events

  - Time factors that Influence Events
    - i.e. when under certain conditions
      - When does someone go to the dentist?
      - When can you have a playdate?

  - "Pieces of Time"; Time measurement
    - Second, hour, days, month, year, century, periodic events

Get on the Timeline

- **What Does Time Involve? –**continued
  - *Cycles, Schedules*
    - *Cyclic events*
    - *Seasons*
    - *Scheduled events (sports, personal schedule, bus)*
  - *Comparing Past and Present*
  - *Rate of Speed -☐ PACE*
    - *Is effected by the subcortex : biorythm, sleep, emotional triggers*
      - *Recognize the Rhythm of Others*
      - *Express Rhythm*

Time: Basic Classroom Principles

- **Understanding the schema of time** as it applies to planning: All activities require time to set up, to complete a task and to clean or wrap up

- **Time estimation**: Knowing the task, knowing the steps of tasks, over versus under estimating: only versus could

- **Tracking and recording** time: visually, mentally, physically

- **Passage of time (pace)-** Starting and stopping a task at a predicted time and Pacing accordingly to meet those time goals

- **Using Time Manipulatives**

Timers

www.timetimer.com

Sense, See and Feel Time
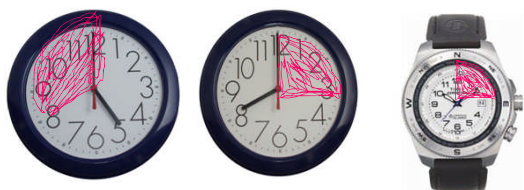
Use Wipe OFF markers in kid section at Staples or Overhead Markers.
Dry erase will not work

Time has Passed…Has the Pace Changed?

Coaching: Review How Time was Used and Identify Time Robbers

Show the Sweep of Time

For the Class Agenda:

- Project on a Smart Board or on the White board the Analog clock view of schedule

- All students should have a mini analog clock at their desks they can write on or refer to.
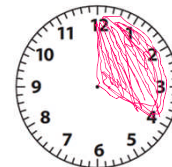
Posting Classroom Routines:

Transition
Take out your Homework
Get a pencil and your calculator ready
Have your text book out
Take a seat and get ready for a fun lab!

Agenda
Write down the new and turn in the old Homework
Review Electrons and protons
H2O Lab and Quiz Review

Homework
Read Chap. 7, pp 45 -52.
Answer Chapter Review ?'s 1-6

Transition
Put your calculator and pencil in your desk.
Take your text book home with you. Stand quietly by the door.
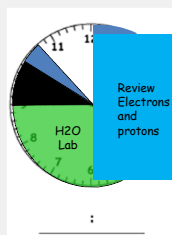
Show the Sweep of Time

- For a Single Activity: Writing Poems

- For a Single Step of a Larger Task: Brainstorming or Editing

- To commit to "Getting a Feel for a Task"
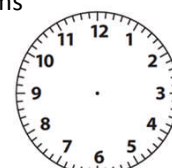
If Students Struggle to Learn How to Read a Clock:

Teaching Hands Clock:
www.silverliningmm.com

Wondertime Clock: Wondertime.com

This clock can be created and used as a pre-cursor to learning how to read an analog clock. It is especially terrific for Pre K -3rd grade students.

"Tell Me Your Time Markers"

http://widgets.yahoo.com/search/?q= clock

Under Settings Dock the Clock to remain on the screen on top of all windows and set the clock to chime every 15 minutes.
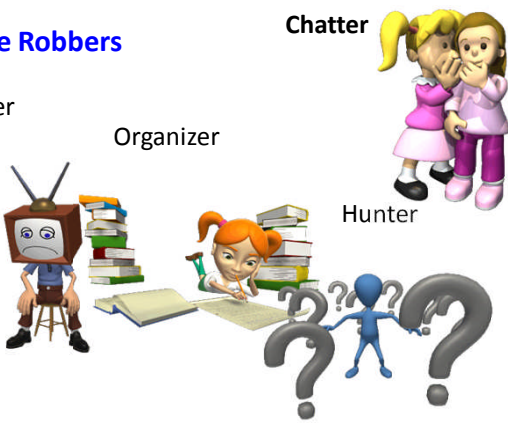
Create Time Markers

1. **Visualize and state the endpoint:**
   "What does a good stop spot look like?"

2. Make sure to state over and over:
   "Factor in time for _____ " (gathering materials, the computer to boot, to find your equipment, etc.)

3. Set up "time checks" at the **½ way point**.
   "What should be completed at this point?"

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Time Robbers

Chatter

Surfer

Organizer

Hunter

Tutor/Resource Room/Speech Session

- Have the student write out a plan of *HOW* they will use their hour with you

- When they get distracted bring them back to the plan

- It teaches students to think proactively

Date of Lesson ▶				Comments ▶		
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Lesson Assignments ▶

Assignment	Type of Task	Strategy	Best Guess Time	Actual Time

Review ▶	Next Time ▶

Adult Signature _____

Name: _____

Date of Lesson►	Notes for Today►

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Lesson ►

Activity	Type of Task	Strategy	Notes
Materials:			
Materials:			
Materials:			

Review►	Things to Think About Next Time We Meet►
Any Time Robbers?	
How easy was the task?	
How did the strategies work?	
Did I organize and store my papers for tomorrow?	

Adult Signature _____

Students Must Learn Planning Skills
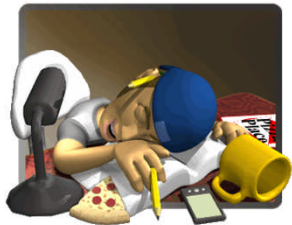
Schedules Do Change

- Things happen that can interrupt a schedule.
- Basic schedules must be constantly changed or adjusted
- "Glitches" happen all the time and the student needs to learn to simply make another plan.
- Have a "**Week at a View of Fairly Set Schedules**": reduces effort, creates a visual of time.

Organizing Materials

Is your bag Packed?
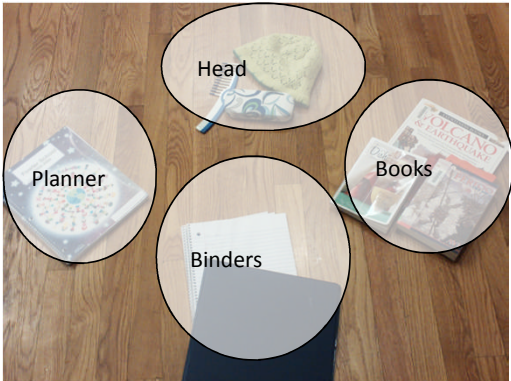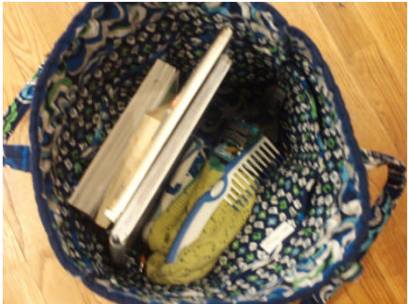
Daily Planner:

Appointments, errands, practices, etc.	**What time is it at?**	**How long will it last?**

Fun Activities

	Is it at a certain time?	**How long will it last?**

Homework/Things to Do

	How many ?'s or pages	**Estimate time to do**	**Total time it will take?**
Important Goal * Must Do * Should Do * Want to Do			
Important Goal * Must Do * Should Do * Want to Do			
Important Goal * Must Do * Should Do * Want to Do			
Important Goal * Must Do * Should Do * Want to Do			

Total Time

Chores, other tasks

	How long will it take?
Important Goal * Must Do * Should Do * Want to Do	
Important Goal * Must Do * Should Do * Want to Do	

Next Day/Coming up:

Date:

6:00	
6:15	
6:30	
6:45	
7:00	
7:15	
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10:45	

Keep the Backpack Open in the Bottom of the Locker

Paper Management: The Younger Student

1. Ask the parents to support the student in beginning to know what types of materials come home

2. How to make a decision about what to do with those materials

Test	**T**reasure	**T**rash	**T**hink on It
I need to keep this.	Something Special (A book report, Special Project)	Papers that i did but there is no reason at all to keep them	I don't need it for a test but I don't want to throw it away yet!

Paper Management

The older student

The 3 Notebook System

3 Ring Working Binder

- Stays with the Student at home and at school
- Contains the planner and current class materials
- Has a monthly calendar, notes and handouts for each class separated by a 2 pocket folder for paper and project information
- If a single class requires more space of a whole binder, than the organization of this separate binder mimics the organization of the working binder

Storage Notebook

- This is kept on a central shelf in the classroom where notebook organization takes place

- After tests, the notes and assignments related to the topic are pulled from the working notebook and are filed here.

- Once a week have a "Super Clean Out" day for removing unnecessary papers from the working binder.

Strategy Notebook

- Contains strategies and handouts needed for independent work

- Divided into sections related with a purpose
  - Reading, Writing, Test Prep, Math, etc.

- Store strategy and planning sheets here as a reference for future assignments

- Can be added to over the years.

Strategy Notebook

Writing	Reading	Test Prep
Math	How to Get Organized	Ways to Think of Information
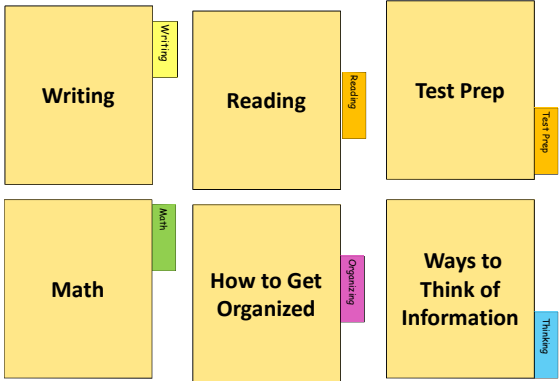
Create Templates for "How to" Strategies

How to _____
The Strategy:

Examples:

Review the Strategy:
   What Worked? What did not work?

How to Edit Papers

Limit the Time:

Add:
- Pick 5 words and replace them with a synonym
- ☐ synonym
- ☐ synonym
- ☐ synonym
- ☐ synonym

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Middle and High School Students: Setting Writing Goals

- To maximize forethought for written assignments, try using consistent grading rubrics from paper to paper
- Example:

Teacher Evaluation: **Comments:**

Opening: Addresses Topic Immediately	Y	N
Introduction: Previews Central Points	Y	N
Introduction: Mentions Work (s)/Author	Y	N
Thesis/Topic Sentence: You Have One	Y	N
Thesis/Topic Sentence: Is Specific	Y	N
Transitions:	Y	N
Supporting Examples:	Y	N
Quotations:	Y	N
Concluding Sentences for each Paragraph	Y	N
Conclusion: Is NOT a summary	Y	N

Sentence mechanics
Run-Ons: _____   Fragments: _____

Spelling: _____

Student's Final Word/ Learner Objective for Next Paper:

Goal:
What I want to improve:
Strategy I'll try next time:

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How to Edit Your Writing

Limit the Time:

Add:

1. Pick 5 words and replace them with a synonym
   - ☐ synonym
   - ☐ synonym
   - ☐ synonym
   - ☐ synonym
2. Pick 3 simple sentences. Find the action of the subject and expand on it by adding:

   * how the action occurred (start your expansion phrase _____ly, like a, with, or without)
   * where the action occurred
   * when the action occurs
   * why the action occurred (since, to, for, because)
     - ☐ expansion phrase
     - ☐ expansion phrase
     - ☐ expansion phrase
3. Pick 3 simple sentences. Add adjectives to describe the subjects
   - ☐ adjective
   - ☐ adjective
   - ☐ Adjective

4. Pick 2 ideas you have. Add an additional example for each one.
   - ☐ Example for idea
   - ☐ Example for idea

Date: _____   Title: _____

Questions/Comments:

_____

_____

_____

Help Received: Y N   If yes, Who? _____ Did What? _____

Teacher Evaluation:

Comments:

Opening: Addresses Topic Immediately	Y	N
Introduction: Previews Central Points	Y	N
Introduction: Mentions Work (s)/Author	Y	N
Thesis/Topic Sentence: You Have One	Y	N
Thesis/Topic Sentence: Is Specific	Y	N
Transitions:	Y	N
Supporting Examples:	Y	N
Quotations:	Y	N
Concluding Sentences for each Paragraph	Y	N
Conclusion: Is NOT a summary	Y	N

Sentence mechanics

Run-Ons?: _____   Fragments?: _____

Spelling Errors?: _____

Student's Final Word/ Goal for Next Paper:

When I write my next paper my goals are to:

1.

2.

3.

Positive Feeling Words
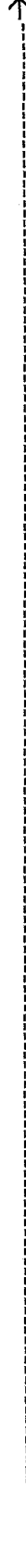
A	B	C	D	E	F	G	H
calm	appreciative	happy	affectionate	adventurous	animated	amazed	alert
comfortable	grateful	blissful	friendly	carefree	ecstatic	astonished	alive
content	thankful	glad	loving	confident	energetic	bewildered	invigorated
cool	moved	joyful		eager	enthusiastic	fascinated	refreshed
fulfilled	touched	merry		encouraged	excited	surprised	zestful
mellow	pleased	optimistic		free	radiant	delighted	breathless
peaceful	relieved	pleasant		inspired	upbeat	thrilled	perky
relaxed	satisfied	splendid		interested	elated	amused	
secure		wonderful		curious			
		cheerful		hopeful			
		proud		motivated			

Negative Emotion Words

← - →
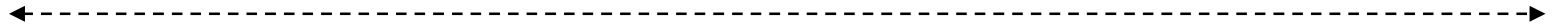
angry	afraid	disappointed	worried	aggravated	hesitant	fidgety	blah
Cross	alarmed	discouraged	uneasy	agitated	Leery	anxious	bored
furious	distressed	depressed	uncomfortable	annoying	reluctant	edgy	detached
hostile	disturbed	exasperated	concerned	frustrated	skeptical	jittery	exhausted
irate	frightened	gloomy	confused	irritated	suspicious	nervous	lethargic
mad	horrified	hurt	perplexed	upset	jealous	panicky	numb
resentful	scared	sad		disgusted	unsteady	restless	passive
terrified		brokenhearted			ashamed	inpatient	indifferent
shocked		blue			embarrassed		lazy
startled		horrible			guilty		tired
surprised		helpless					withdrawn
lonely		pessimistic					dull
miserable							weary
cold							

How to Identify Character Emotions

- Positive Emotions
- Negative Emotions

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Examples of Strategy Sheets:

How To:
- Take Notes
- Write a Science Lab
- Preview a text book: THIEVES (readwritethink.org)
- Describe a Character
- Summarize a Book
- Write a Thesis Statement

Studying For Tests

- Most kids do not create a Note to Self from their hindsight for previous tests
- This is a critical skill to teach
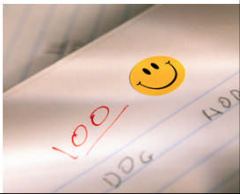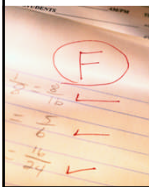
Study Pie
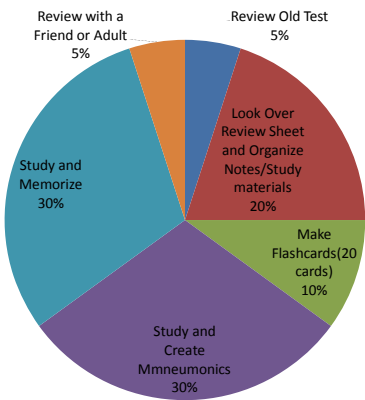
Studying For Tests: Look Back

- What was my Grade on the last test?
  - Strengths and Things to Change Next time
- What was the format of the test?
- Teacher Style?
  - Broad vs. Detail Oriented
  - Where did he/she ask the most questions from?
    - Homework? Textbook? Class notes?
- How had I prepared? What worked? What would I not repeat?
- Trying going to online resources for the text books

Studying For Tests

- Prioritize Study Time:

Know	Sort Of Know	No Idea

Know the Study Strategies that Work for You

☐ Use or Create a Study Guide	☐ Highlight/Reread/Outline Class Notes
☐ Flash Cards	☐ LINC Notes
☐ Acronyms	☐ Make Maps/Webs of Key Information
☐ Cornell 3 Column Notes	☐ Make Lists
☐ Make A Cheat Sheet Of Key Terms/Formulas	

Figurative Language

Phrase	Literal Interpretation	Figurative Deduction
	Paraphrase: Determine the Impact: If _____ Then _____	Apply the Impact:
	Paraphrase: Determine the Impact: If _____ Then _____	Apply the Impact:

Materials: _Saying one thing Meaning Another_, Cecile Spector, The _Expressionary_

1. Give phrase in a sentence.
2. Interpret Literal meaning.
3. Apply impact to the sentence
4. Clinician creates a sentence using the phrase; student interprets impact.
5. Student uses the phrase in a sentence; clinician interprets impact.

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Phrase	Literal Interpretation	Figurative Deduction
A Dime A Dozen: Those hats are a dime a dozen.	Definition if interpret literally: **12 things cost 10cents** Determine the Impact: If **they cost 10 cents** Then **they are cheap and easy to get.**	Apply the Impact: Anything that is common and easy to get.
	Definition if interpret literally: Determine the Impact: If _____ Then _____	Apply the Impact:

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Working on Figurative Language

1. Read the phrase in the sentence.
2. Complete the figurative language worksheet.
3. The teacher uses the phrase in a sentence in an everyday example.
4. The student uses the phrase in a sentence in an everyday example.
5. The student applies the phrase to another part of the book/subject they are studying.
6. Finally the student interprets the meaning the phrase was originally used in.

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Teach management of Computer Files!
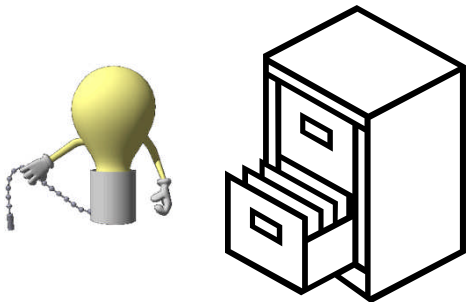
Managing Online 'Paper'

- Internet Research   www.delicious.com
- Research Papers   www.noodletools.com

- Printing to Programs
  - Microsoft onenote
  - Nuance PDF

Organizing Students

Attention

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- Selection
- Capacity

  – **The human brain can only attend to so much information at one time.**

  – **Typically this is about 7 (+ or – 2) pieces of information.**
    - In a child, the capacity to hold information is less as their attention systems are still developing.
    - As a result, at any one time, less information is processed and remembered than an adult

Increasing Awareness

- Verbal Mediators
- Visual Mediators

Declaratives: The Language of Coaching

Imperative vs Declarative Language

Imperative: Command

Declarative: ○ ○ ○ ○

"I need to… "
"Should I…..?"
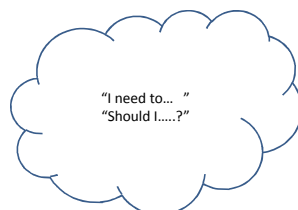
A Declarative References or Describes 'what' is to be accomplished so the learner creates the goal vs. commanding 'what needs to be done' to achieve the goal.

What is Declarative Language?

- The type of language used when one is communicating what the mind is producing. Develops inner speech.
  – "I need to…."

- Allows us to do "small talk".
  – "She just said she got her nails done. I went this weekend with my mom too!"

- Helps the brain to integrate information from multiple sources
  – Integrating body language, tone of voice, 3 peers, 'where in the four square game' we are, my own idea

- Allows us to learn and process 'online' in an integrated fashion
  – *I can* learn and think at the same time. So I will add this comment about the Colonists….

1 Relationship Development Intervention. Dr. Steve Gutstein

Declarative Language in Academics

- Comment on a shared experience
- Compare and Contrast
- Think back and reminisce
- Brainstorm
- Plan and prepare
- Integrate ideas
- Repair misunderstandings

1 Relationship Development Intervention. Dr. Steve Gutstein

Declarative Language
Fairly Independent Students

– *"hmm…"*

– "huh!"

– *"Oh"*

Use of more subtle facial expressions and voice tones

Medium Support

– "How is it going?"
– "How's your time/pace?" (with a visual gesture towards the clock)
– "What's another way to…."
– "What strategy would help you to get started?"
– "Is it a good idea to…right now?"
– "Could you see yourself using any different strategies?"

High Level of Support Needed

– "What would you be carrying if you were prepared to walk into this class?" (as he walks into class)
– "What would your desk space look like if you are done with the spelling assignment and you are ready to work on the writing assignment?"
– "What do you see in this paper or assignment when it's done?"
– "What will this assignment look like in 15 minutes?"
– "What would a good stop spot look like?"
– "How will you decide (or what will you see) when you are done?"
– "If you were ready for outlining this paper, what would you have with you?"
– "Does your work match your plan?"
– "Where do you start to edit?"
– "Where do you keep your _____?"
– "What strategy worked?" "When might you picture yourself using that again?"
– "When you do _____, what do you see happen?"

Increasing Awareness

- Verbal Mediators
- Visual Mediators

Linda Murphy M.S., CCC-SLP, CEIS

pediatric speech language pathologist

RDI® Program Certified Consultant
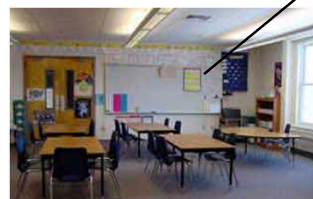
My Top 5 Reasons to Use Declarative Language

1. Model self-narrative to help your child develop his or her own inner voice.

Early on infants and toddlers develop and learn language when they hear it from others. When children are just learning to talk, parents are reminded to label objects, narrate simple actions and comment on their child's focus of attention so that the child will learn and then use those words accordingly. After the initial language spark is ignited, most of us then go on to develop our own voice that we use to share our thoughts, recap experiences, talk about what we are doing, and talk about what we are thinking.

Most of us also then go on to create our own inner voice. This is a hugely important by-product of our language learning. We use our inner voice to problem solve and plan. We remember what we have learned or noticed in the past, and apply it to the here and now. For example, imagine you are getting ready to go to work and you can't find your keys. Your inner voice may say something like, 'Hmmm…. Now when did I last see my keys? Where do I usually put them down? What jacket did I have on yesterday?... Maybe they're in the pocket." Your inner voice helps you think through the problem and gets you started on a plan of action to solve it.

Children with ASD or Executive Functioning difficulties do not usually develop this inner voice to regulate their thoughts and actions on their own. Just as modeling was important when your child was learning to talk, thoughtful modeling now, in this regard, is equally important. So – talk out loud, think out loud, work through a problem, make predictions, ponder opportunities, consider possibilities, and reflect on past experiences when you are with your child. They will learn from your models, internalize the ideas, and begin to form their own inner voice.

2. Provide a window into another person's perspective.

Most of us know that children with ASD have difficulty taking perspective. Using declarative language to share your thoughts and feelings provides your child a regular window into these things in an inviting, nonthreatening way. We are providing them information that is critical in a social interaction that we know they may not pick up on their own. When we present declarative language in this way, we are not asking them to provide an answer that may be right or wrong. Rather, we are clueing them into social information and then allowing them to decide what to do with the information.

By regularly using declarative language in this way, we are also slowly building memories and awareness that different people have different thoughts, opinions, perspectives and emotions. For example, you say something to your child but he is facing the other way, appearing not to listen. Rather than say to him "turn around!" or "look at me" (both imperatives) share your feelings and perspective with declarative language: "It would make me happy if you would face me when I'm talking to you" or "I feel like you are not listening to me." Or, if you arrive home and your child does not say hello, instead of saying "say hello to me" we could say, "I really like it when you say hi" or "I feel disappointed because you haven't said hello to me yet." In my experience, kids with ASD usually make choices that are good for the relationship once they are provided this information. It's not that

our kids don't want to say hi! It may just be that they don't realize how happy it will make you when they do.

3. Help your child zoom out to see the big picture and generate multiple solutions to a problem.
Often times when we get caught up trying to get our kids to do specific things, we all lose sight of the big picture. Because children with ASD are strong when it comes to details, but weak when it comes to seeing the big picture, it is important to think about the big picture when we present information. Giving very specific directions or questions that have one right answer promotes that focus on details. For example, if we tell a child to "put the toy in the box" or "say goodbye to Grandma" we are zooming into the details and creating a situation where there's one and only one right answer. However, if we use language instead to comment on what we see in the big picture: "I see a toy on the floor" or "Grandma is leaving" - we are instead encouraging our children to take a step back, notice the context and situation around them, and subsequently form a plan of action that makes sense to them. We are also leaving open the possibility that there may in fact be more than one solution – i.e., maybe the toy could go on a shelf or in the toy box, maybe the child could say "goodbye," wave, give Grandma a hug or walk her to the door. Generating multiple or alternate solutions to a problem can be hard for kids with ASD. Declarative language naturally creates opportunities to practice this skill.

4. Empower your child to be a <u>problem solver</u> rather than <u>direction follower</u>.
Anytime we tell children what to do, ask them to follow a direction, or ask them to answer a question that has a right/wrong answer, we are honing their receptive language skills. This is not a bad thing, but it may not be what your child needs most. In contrast, if we use declarative language to present information about the environment or situation at hand, we are instead inviting her to notice this information and develop a plan of action. We are inviting her to have an "aha!" moment where she figures out on her own what to do with presented information. We are giving her an opportunity to think! Problem solving moments are huge for all children as they learn to view themselves as competent human beings in the world. Kids with ASD usually have been asked right/wrong questions and given directions from a very young age. More practice in this area is not what they need most! Rather, they need practice problem solving, and identifying themselves as competent problem solvers. It is important to become comfortable presenting information to your child, and then waiting. The waiting time allows your child time and space to consider his next step. Here are some examples of direction following vs. problem solving opportunities – can you feel the difference?
"Throw that away" vs. "There is a piece of trash on the floor."
"Wash your hands" vs. "Your hands look dirty."
"Open the door" vs. "I heard someone knocking on the door."
"Give that to your sister" vs. "I sure bet your sister would like to use that now."
"Pass me that" vs. "I can't reach that."

5. Help your child read what's going on in his environment.
We know that it can be difficult for our kids with ASD to tune into the social information that is going on around them. Rather than telling them exactly what to do and when to do it, use declarative language to help them notice what is important! For example, if it is time for a transition, instead of telling your child "go to the table for snack" or "put on your coat," direct his attention toward the changes in the environment: "I notice all the kids are at the table" or "I notice all the kids are putting on their coats." This will help internalize the importance of periodically checking in on one's environment; there are visual clues available all the time, and they are important to pay attention to! We want our kids to learn that information is not always going to come to them - they have to become active information gatherers. In contrast, if we are using imperatives all the time with our kids, information *is* coming to them on a regular basis, and they don't have the same need to look around or read the behaviors of others.

How will you look?

Match the Picture Head to Toe

☐ **Helmet**
☐ **Mouth Guard**

☐ **Shirt**
☐ **Shoulder Pads**
☐ **Gloves**

☐ **Cup/shorts**
☐ **Socks**
☐ **Cleats**

☐ **Stick**
☐ **Water bottle**

Less Structure

21

This was a visual to remind a student how to set the table.

Writer's Workshop

Breakfast

Fast Morning	A Little Time Morning	Slow Morning
• Breakfast Bar or Drink	• Cereal	• Pancakes
• Cereal in a cup	• Oatmeal	•Eggs
• Hot Pocket	• Fruit	•Quesadilla

How Should I look in Class?
Am I a Talker or a Listener?
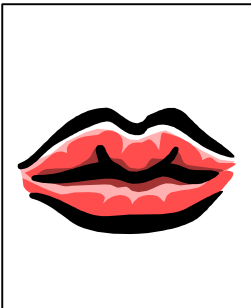
Self Regulation Strategies

"When this task ends. How do you picture yourself?"

Now:

Being Aware

To Increase Awareness: Make the Implicit .... Explicit
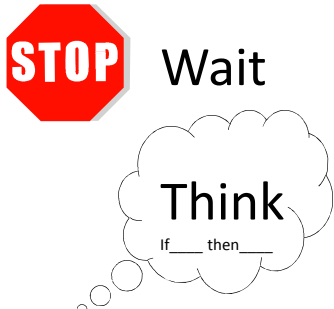
Have students check in at natural barriers and then match the picture!

STOP

Space
Time
Objects
People

Instead of:	Maximal Cue	Faded Cue
While in the mud room and yelling after the child "Stop! Hang up your coat and put your shoes away!"	"We are at the **mailbox**. When we pull in the garage I want you to see yourself in the mud room. What are you doing?"	We're at the mailbox. Do what you need to do when we get inside.
While in the hallway and calling after the student "Stop at your locker! Hang up your coat and put your winter shoes away!"	"We are at the **Library**. When we get to the doorway I want you to see yourself at your locker. What are you doing?"	We're at the library. Do what you need to do when we get to the hallway.

Instead of:	Maximal Cue	Faded Cue
Entering the classroom from recess and saying "Stop! Hang up your coat and put your snow shoes away!"	"We are at the **main office**. When we turn the corner I want you to see yourself at the cubbies. What are you doing?"	We're at the main office. Do what you need to do when we get to the cubbies. Hmm. We are at the main office. What's next?
"Stop! Pick up those wrappers you left on the lunch table! And stack your chair along the wall!"	You are at the doorway. Turnaround and read the room before you leave. Do what you need to do.	New Room Rule

---

STOP Wait

Think

If____ then____

***Really focus on asking the student "While you are doing this..what do you see yourself doing next?"

Tell Me
Do it!

Now:

It is a Glitch
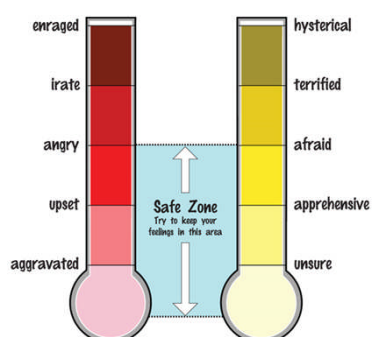
That was Unexpected

Getting a Feel for It

A "Rubber Chicken" Moment

Emotional Color Wheel
http://www.do2learn.com/organizationtools/EmotionsColorWheel/index.htm

enraged			hysterical
irate			terrified
angry			afraid
upset	Safe Zone Try to keep your feelings in this area		apprehensive
aggravated			unsure

Self Regulation Trick

Point out the Features of:
- Space
- Time and Sequence
- Objects –Materials
- People

Trick: Turn the task into a "job" and name for the child their "job title"

Supplier, Builder, Tracer, Washer, Holder, Dumper , Wiper, Loader, Sprayer, Wiper

Allows the child to stay engaged and to participate towards task execution to the degree that they are able.

Teaching Students to be
Organized Thinkers

Be a "Feature Teacher"

Block and Box
to Identify the Critical Features

Battle
1. Reason
2. Location
3. Tactics
4. Weapons
5. Generals
6. Winner/Loser/Outcome

"Let's Make Valentine Cards for our Mom and Dad!!!"

MOM
I love you!

Greeting

Picture

Catchy Phrase
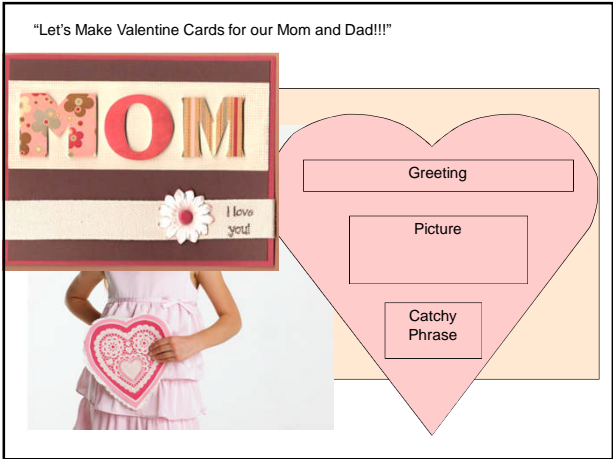
Puppet

- **Part 1:** After choosing a fiction book and reading it, you will have the chance to bring the main character in the book to life by **designing a puppet**.

- Your puppet will be made from a wooden spoon or paint stick and should represent the main character in dress and appearance from the time period.

ADHD: ASD

Materials:

Accessories (hat/jewlery /scarf)

Head: hair, style, facial hair, makeup

Clothing
Shirt, outerwear, Markings
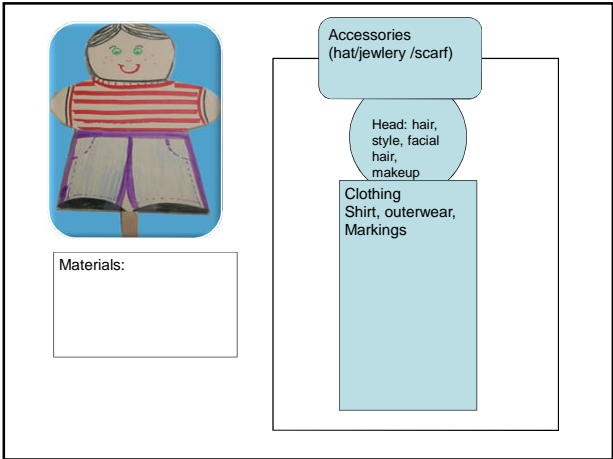
Award

- Next, you will **create a special award** to honor the most noteworthy accomplishment of your chosen character.
- You can create a trophy, ribbon, certificate, or plaque to award your character.
- Your award must have a written paragraph describing the reason your character deserves the recognition.

AWARD
this special award is for...

This Award

Signed:

Name of organization

Picture or Emblem

Name of Award

Who Given to

What the Award is For
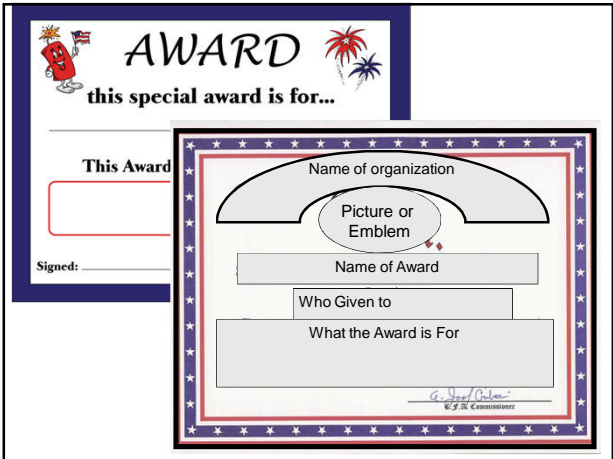
Newspaper Assignment

- Students will create the front page of a newspaper that reflects the book they have read. Each front page should include 2 articles about the book, and you must also choose 2 of the following: a weather report, editorial or an editorial cartoon, a classified ad, sports report, and/or entertainment report.

PRODUCT MARKETING MANAGER

Krause Corporation, an industry leader in domestic markets and an ever expanding presence in the international market place, has an immediate opening for a product marketing manager.

Duties will include: responsibility for marketing tillage and grain drill products, support product development, develop product strategies, lead projects and implement market research, develop literature and promotional material, manage pricing activities, and participate in marketing events, trade shows and media events.

Successful candidate should have a BS/BA in Engineering/Business/Marketing, MBA preferred, 8-10 years experience in marketing/sales/product management, knowledge of Agronomy and ability to apply principles to Krause product line. 20-30% travel, both domestically and internationally.

Excellent starting salary, plus a complete fringe benefit package including: group health, dental, employee/spouse/dependent life insurance, 401(k), profit sharing, and tuition reimbursement.

If qualified, submit your resume in strictest confidence to:
Krause Corporation
305 S. Monroe • Hutchinson, KS. 67501
twhite@krauseco.com
An EOE M/F employer

- Information about the Business Position
- Responsibilities/Job Description
- Experience
- Salary/Benefits
- Contact Information

Ad

Business/Position
Job Description
Hours
Salary
Benefits Perks
Contact Information

Ancient Egypt Time Line Landmarks

- On an index card carefully draw a colorful picture representing your topic. At the top of the card write the "topic" and date. Below the picture write two or three sentences explaining your topic. Your sentence should state who or what the card is about and describe what's most important to know about this person, place or event.

What is the Future Picture of this Egypt Assignment?

- Topic
- Date
- Picture
- Who
- What/ Importance

Write a Poem Containing Onomatopoeia

- Your assignment is to write your own poem using the ideas provided in class. Be sure to include six examples onomatopoeia in your poem. You can write on any topic of your choice.

Onomatopoeia Poem

Writing Assignment

- Use vivid details to describe a local diner. Write in descriptive detail what you see. What is the waitress like? What is the floor like? Describe the food. When I read your writing I want to see this restaurant in my mind's eye!

Diner/Waitress/Food/Floor

Have You Tried Cool Iris?

- www.cooliris.com

- This is a great website if you need to find photos fast so that your student has a visual image for novel circumstances, for writing, projects, etc.

High School Assignment

- For your term project you will create a game for the book Hamlet. You can create a board game or a card game. Your game must reflect a major theme in the book, show how the characters relate to this theme and the evidence from the book that supports your theme. You will be graded for content, creativity and attention to detail.

Create a Game
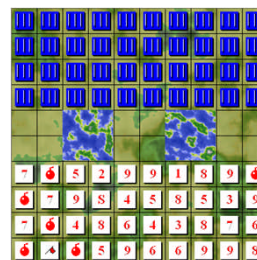
Practice with Your Assignments

- Assignment:
- Google Image or Text Book Image or Visual Sketch
- Block and Box
- Label the boxes
- Start working

Untamed and Uncut: Teaches same but different

http://animal.discovery.com/search/results.html?query=untamed+and+uncut

Introduction
Reason for the Problem
Explanation of Animals
   Computer Animation
      •Parts
      •Size
      •Appearance
      •Special Features or Skills
      •Behavior
Interviews
    •Observers
    •Experts in the Field
    •Victim

Problem/Solution
   •Solution
   •Obstacles/Dangers
   •Resolution
Emotional Reaction of the Viewer
Show
   •Narration
   •Amateur Video Footage
   •Film Production

MythBusters Episodes

Challenge

1. Possible Solutions
   a. Single Solution?
   b. Multiple Solutions?
      a. Are the solutions simple or complex?
      b. Required Materials
         a. Amount of materials?
         b. Ease of getting materials?
         c. Special Tips
      c. Actual Steps of the Solution
2. Obstacles to the Solutions
   a. Plan B?
   b. Plan C?
3. Success of the Bust?
4. Reaction to the Bust?
5. Reason/Rationale for the success or failure of the bust
   a. Scientific
   b. Unexplained?
6. Conclusion
   a. Is it realistic or plausible?
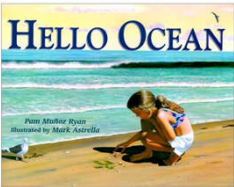
How stuff works: youtube.com

- http://www.youtube.com/watch?v=i6BIyQJZdTg&feature=related

Reviews: I like them because they evoke emotion and opinion

- Amazon:
  – Book reviews
  – Game reviews
  – Product reviews
- Restaurant reviews
- iphone App reviews
- Movie Reviews

**Tip: Teaches the unwritten social rule of Diplomacy vs. Honesty

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Writing Strategies
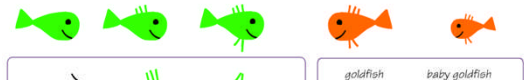
Picture: Draw it!
Whole to the Parts: _____
Use these features to add to your picture!

HELLO OCEAN

Pam Muñoz Ryan
Illustrated by Mark Astrella

Ed Emberly Books

If you can draw these 6 things,
you can draw a fish,
here's how

goldfish   baby goldfish

Summarizing/Analyzing Complex Fiction

Beyond Story Grammar

* www.caroleedean.com
* Uses the techniques published authors use to analyze their stories
* Story Grammer Record Form

Students Will Write A Grant Proposal.
Here is a sample to guide you.

B. Proposal Description:
English teachers know that the ability to supervise a student through the writing process is perhaps the most important element of instruction. Computers are the tools that are the key to ' facilitating this.
'Even twenty years ago Charles MacArthur wrote:
[The computer] is a powerful and flexible writing tool with certain physical characteristics and information-processing capabilities that may affect the writing process and facilitate certain types of writing instruction. Computers can support the cognitive processes involved in planning, writing, and revising text. Equally important is the potential impact of the computer on the social context for writing in the classroom. (536)
Windschitl and Sahl offer a slightly more technical understanding of why using computers in the
classroom aids in the writing process: "The screen editing and printing capabilities of
microcomputer systems improved the production of students' texts by subordinating the

---

Create a Table Outline for Writing

Rationale for my proposal.	
Expert Evidence Example #1	
Expert Evidence Example #2	
History of the Problem	
What is the status of the problem now?	
What is my proposed solution	
What would be the impact of this solution?	
Expert evidence #1 that supports my idea	
Expert evidence #2 that supports my idea	
Previously tried solutions	
Why they did not work	

Criticism I	The church and the state should not be separated
Evidence 1: Quote one from the following source:	
Evidence 2: Quote two from the following source:	
Type of criticism	
Best possible solution	
Would this solution work or would it not work?	
Evidence 1 for the solution: Quote one from the following source:	
Evidence 2 for the solution: Quote two from the following source:	
Transition Statement (topic sentence)	

Criticism 2	
Evidence A: Quote one from the following source:	
Evidence A: Quote two from the following source:	
Type of criticism	
Best possible solution	
Would this solution work or would it not work?	
Evidence B: Quote one from the following source:	
Evidence B: Quote two from the following source:	

Sophomore High School Essay:

In brief the student must answer a Document Based Question on the Protestant Reformation in which they have to analyze several criticisms of the church, provide 2 types of evidence which demonstrate this type of criticism, the type of criticism it is, offer a solution and then analyze whether this solution would or would not work and offer evidence from two sources supporting this opinion.

29

Teaching Methods

FOSTERING THE DEVELOPMENT OF EXECUTIVE SKILLS

A 3 Phase Coaching Method to Improve Task Execution

1. Plan
2. Do
3. Review

Coaching

Review of the 3 Phase Coaching Method to Improve Task Execution

1. **Plan**

Question:

Time

Same but Different

Future Picture

Steps:

Strategies:
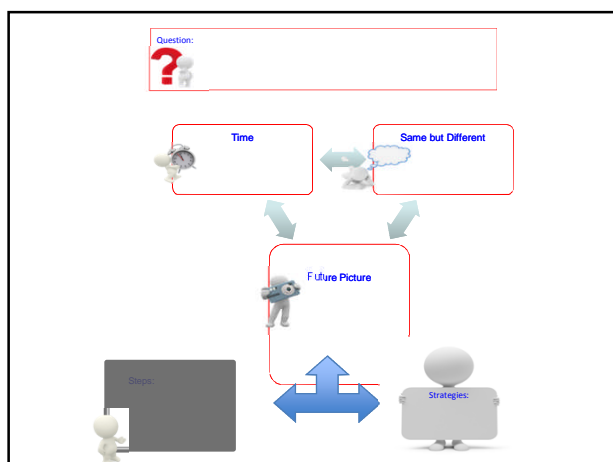
What Question will be answered when the work is completed?
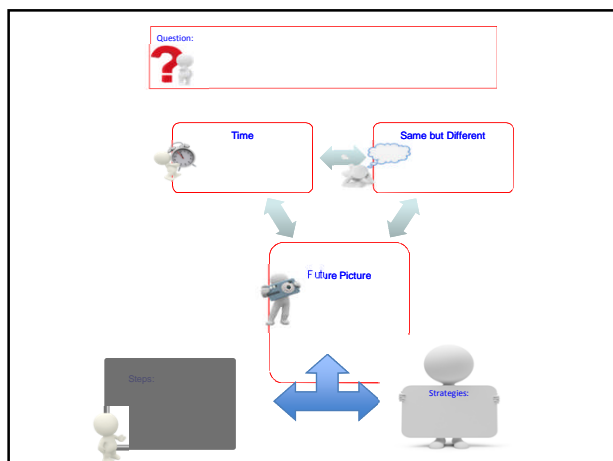
How much time does the student have?
- Be sure to factor in time for **planning**
- Mark the ½ way **checkpoint**
- Factor in time for **clean up and review**
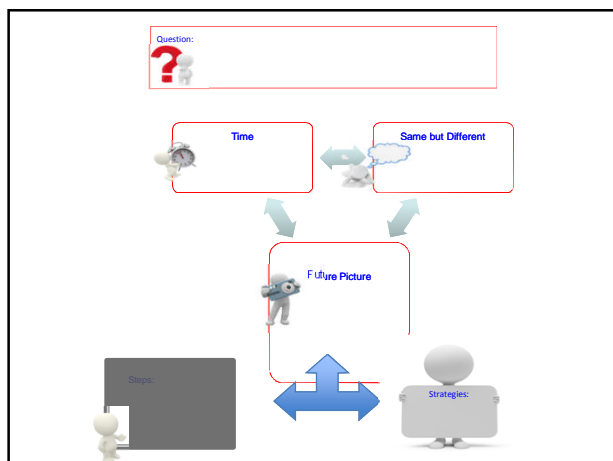
Foster Forethought:

What future picture should the student have?

If the allotted time is successfully used how should the student look? What does the completed work look like?

If the time is used effectively what will the student feel good about having completed?
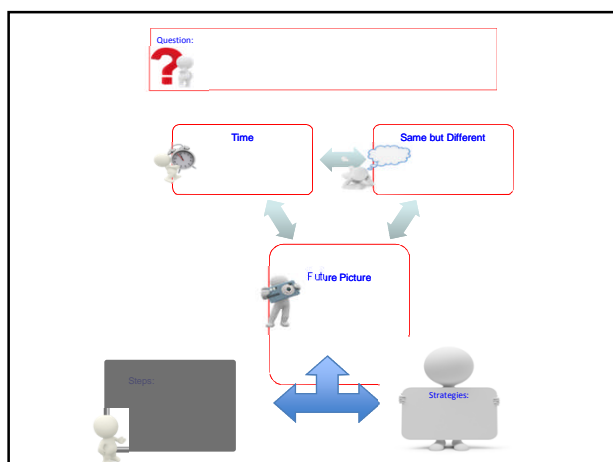
Foster Episodic Memory:

How is this work the same but different to a previous lesson, assignment or task?

Let's compare…..
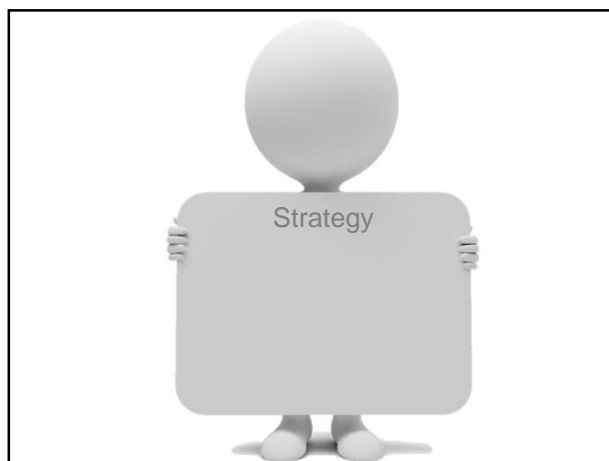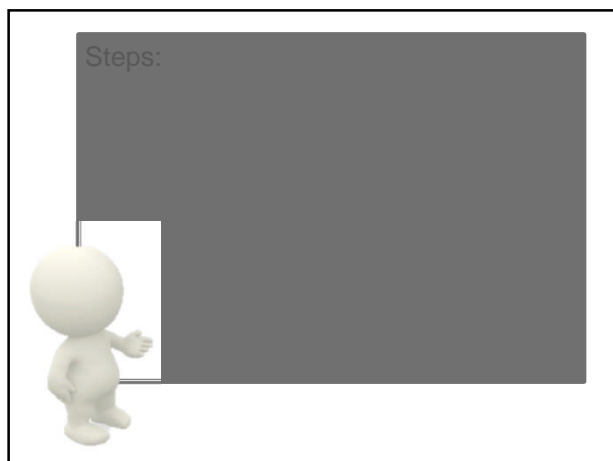
Steps:

Strategy

Adopt a 3 Phase Method to Improve Task Execution

1. Plan
2. **Do**

Check Point

- Am I half way done?
  - Am I still focused on the goal?
  - Has my priority changed?
  - Am I still answering the question?
- What are my time robbers?
- How are the strategies working?
- Do I need a new strategy?

Adopt a 3 Phase Method to Improve Task Execution

1. Plan
2. Do
3. **Review**

Planned vs Actual:
Discuss if you Over or Underestimated Time

Review

- What worked? What did not work?
  - Use Peer mentors
- Positive Self Reviews

Positive Self Reviews

When a student is done with their work ask them or a peer to circle/highlight/identify:

- The adjective they like best
- The sentence they like
- The part of the drawing
- The math problem of which they are most proud

This teaches critical thinking, prioritizing and self awareness skills

What Should a Grade Reflect?

A+

Slide 1:
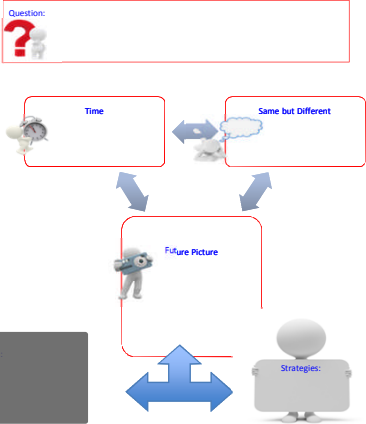
Goal

Future Picture: This is how I picture my accomplishment!

Obstacles

Time:

Plan

Do

Review: Note To Self
What worked?   What did not Work?

Slide 2:

Mission Planning
• **Determine the Objective**

1. What is the future picture? (How do you picture what you have accomplished?)
2. Make sure the objective is clear and achievable
   a. **Picture the amount of time you have**
      • **What is the half way point? At that point where do you need to be?**

• **Identify the Obstacles**
   What might detour you?

• **Identify Your Resources**
   Who's on your team?
   What are your strengths?

• **Evaluate Lessons Learned**
   Benefit from your or other's past experiences
   What has worked before
   Do not repeat what did not work before

• **Develop a Course of Action / Tactics**

• **Expect the Unexpected: Have a Back Up Plan**

Plan A: **A**lternative

Plan B: **B**e Tweener

Plan C: **C**ompletely
              Different

Slide 3:

Work It Out

Look Forward	Look Back	Set the Time	Stay on Track	Reward!
I see:	Last Time?	When Will I be done?	½ point?	

Slide 4:

Choosing EF Therapy Tasks

- Must be Motivating (relaxed state of alertness)
- Must have Multiple Materials to Organize and Manage – Include Irrelevant Materials
  - Depending on skill level of the child – I require the student to find the materials and to allow enough time to do so.
- Multiple Choices of Outcomes – So the individual must choose a reasonable goal for the given amount of time
- Carry over to a "Same but Different Task"
  - Each successive task should become increasingly open ended
  - Review "Notes to Self" from previous task to build episodic memory
- Time demands
  - Limit time to teach pacing
- Requires Student to "get a feel for it" by just starting – teaches self regulation and delayed gratification
- Carry Over the Planning Skills to Academic Tasks

Slide 5:

Hello, Cupcake!
Irresistibly playful creations anyone can make

Karen Tack & Alan Richardson

Tip: The Amazon Website has "how to" videos on the web page for the book!

Slide 6:

Goal Hello Cupcake- Butterfly Cupcakes! Yum!

Future Picture: This is how I see my accomplishment
I leave Sarah's office with 4 Butter Flies

Obstacles
Time
It is new... it could be hard
Sarah talking
Distractions-eating chocolate! Sarah talking!

Time:
We Have 30 minutes
Factor in: 5 to Plan   Leaves Us with 15min
5 to Gather materials @   of work time
5 to clean up

Plan
melt chocolate
trace picture
trace with chocolate
fill in with orange chocolate
cool off / clean up
Admire!

Review Worked   Not Work
They look great!   Cooking 30 sec → it burned
melt 10 sec + massage → melt 10s   Using too much orange
Tapping the table after the orange   Syrup chocolate / toothpaste chocolate

Mission Planning

1. Determine the Objective
   a. What is the future picture? (How do you picture what you have accomplished?)
   b. Make sure the objective is clear and achievable
      i. Picture the amount of time you have
      ii. What is the half way point? At that point where do you need to be?
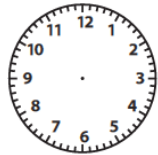
2. **Identify the Obstacles**
   a. What might detour you?

3. Identify Your Resources
   a. Who's on your team?
   b. What are your strengths?

4. Evaluate Lessons Learned
   a. Benefit from your or other's past experiences
      i. What has worked before
      ii. Do not repeat what did not work before

5. Develop a Course of Action / Tactics

6. Expect the Unexpected: Have a Back Up Plan

   - Plan A: AlternativePlan

   - Plan B: Be Tweener

   - Plan C: Completely Different

My Goal		This is what you need to do. Why are you Motivated to do this task?
Future Picture		Picture your task as completed. What do you see if your goal is achieved? Some things to think about: • How much have you done? • What time is it? • Do you see yourself as stressed or relaxed? • Once this goal is achieved what do you see yourself doing? • How will you reward yourself for accomplishing your goal?
Time		☐ What time is it now? Mark the clock ☐ How much time do you have to work on this goal? Show the sweep of time on the clock. ☐ When time is up what do you picture yourself doing? What is coming up next? _____ ☐ Do you need to factor in time for gathering materials? For the computer to 'boot up', to get a snack, to find the assignment? Mark this time on the clock ☐ Do you need to factor in time for cleaning up and putting away materials? ☐ Do you need to factor in some time to put on the "final touches" and do that extra effort? ☐ How much time do you have left to work? ☐ Mark the ½ way point of this time. ☐ If you were half way done at this point what you have achieved? _____
Obstacles		What might detour or distract you from completing this task? Consider: • Internal factors (hunger, headache, tired, emotions, confused) • External Factors (noise, disorganization, lack of materials, interruptions, distractions (computer)) • Anticipate that tasks can multiply themselves
Plan		What is your plan? Look back: Have you done a similar task before? 　　　Yes? 　　　　　What worked? Repeat these actions 　　　　　What did not work? Plan ahead to avoid repeating these mistakes Is it a new task? Have you done something that is the same but different?
		Do it! ☐ Keep checking the time ☐ Avoid distractions ☐ Know your time robbers ☐ Keep using your strategies and 'notes to self'
		Review: 　　　What worked? 　　　What did not work? 　　　Consider Planned vs Actual Time required for the task. How were your time estimates? Were you Over or Under Time?

Slide 1:

Goal Make Chocolate Butterflies from Hello Cupcake. Yum!

Future Picture: This is what I see for myself when I am done!
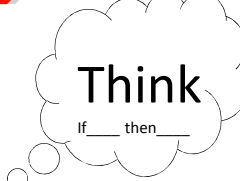
4 Completely Finished and Cooled Butterflies! No cupcakes

Obstacles Time. It is new—never done it before. Could be Hard to do. Sarah Talking---Shhhhh
Chocolate is a distraction – I might eat it!

½ Way Pt

Time:
5 min to Plan | Leaves me with 15' to work!
5min to Gather Materials | 2 Butterflies at ½ way point
5 min to Clean up

Plan
Gather Materials | Fill in with Orange Chocolate
Melt Chocolate | Cool off and clean up
Trace picture | Admire! ☐
Trace with Chocolate

Do Worked! ☐ | Did not Work ☐

Review
The look great! 10 sec melt choc. Then massage chocolate to Honey Consistency. Tapping table to blend orange | Cooking 30 sec. it burned ((Syrup or toothpaste consistency of chocolate. Only had time for 1 ((. Melt choc. Then make the picture.

Slide 2:

STOP Wait

Think

If____ then____

Tell Me
Do it!

***Really focus on asking the student "While you are doing this..what do you see yourself doing next?"

Slide 3:

Change It Next Time to Use Experience to Guide Planning and Behavior

• New Butterfly Shape:

• Random Design

Slide 4:

Goal Make an Animal out of Chocolate

Future Picture: This is how I see my accomplishment
A Dolphin Made of Chocolate Jumping Over a Blue Wave

Obstacles
Time New!
Materials ·Could be too small/Difficult/
·Distracted by looking for the "Perfect Picture"

Time: 25 minutes
8min → look for Picture ℗
3 min → Fast Clean Up!
5min Fast gather of Materials
5min to trace + melt chocolate

Plan Look Up Pic Melt
Trace → Wax

Do

Review
Worked | Ø work
✓ table tap to Blend chocolate colors | ✗ "syruppy" chocolate
✓ Watching time while look for Dolphin | ✗ Not having a Cookie sheet

Slide 5:

Pretzels –Very Open Ended

Slide 6:

Goal Make a Chocolate Pretzel

Future Picture: This is how I see my accomplishment
6 Finished decorated Sticks

Obstacles Never Made pretzel Sticks
– No molds – Enough Ingredients? – Tired
– No Plan – Time – Grumpy

½ way 3 Points

Time: 35 minutes

Plan ☐ Music → Cheer Up ☺ ☐ Fill bowls of "extras"
☐ Cookie Sheet ☐ Melt Chocolate
☐ Wax paper ☐ Dip/Cool
Do ☐ Add "extras"
☐ Drizzle White chocolate
☐ Clean Up

Review
Worked ☺ | Not Work ☺
✓ Dip → Cool → Add | Add extras when chocolate melty → they slid off
✓ put extras on plates | Bowls - too shallow to dip'n
✓ Music
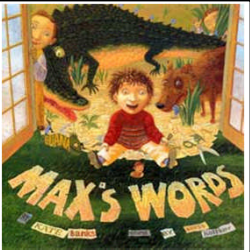
American Girl

- Tiny Treats

Max's Words

- Read the book
- Make a collage

Goal   Make a Collage

Future Picture: This is what I see for myself when I am done!

Leave with at least 10 words and 3 pictures.

Obstacles   Time. It is new—never done it before. Could be Hard to do. Sarah Talking---Shhhhh
Hard to find words. I don't like cutting.

½ Way Pt:

Time:
5 min to Get words   Leaves me with 5' extra to work!
5min to glue
5 min to Clean up

Plan   Gather Materials
Look for pics and words   Glue and clean up
Cut pictures   Admire! ☐
Lay out Pics and words

Do

Review: Worked! ☐   Did not Work ☐
Cutting lots of words and deciding   Trying to find perfect words.
later to use them or throw out. Lay   Not laying out the words.
out first and glue last. Lick finger to News magazines
pick up words.

Use Your Experiences

Scrapbook   **Paper Punch Art**

Try Zoom Website

Include in Your Project Kit Relevant and Irrelevant Materials

Can also be carried over as a writing task by writing up your experience for the zoom website.

Sculpey Clay: Books and Online

www.sculpey.com/projects.asp

Goal Military Weapons Poster

Future Picture: This is how I picture my accomplishment!

3 Pictures with Captions, Title, 3 Descriptive paragraphs. Sketch it out!

Obstacles

Too much time on pictures. Writing is hard. Peers Talking. Missing Materials

Time:

60 Minutes

Plan: 5 Minutes to get materials together. 15 min to print pictures. 10 minutes to make captions. 25 minutes to write paragraphs. 5 minutes to clean up. Mark ½ way point. May need more time to write.

Review: Note To Self

What worked?   *What did not Work?*

211

Title

Picture	Picture	Picture
Caption	Caption	Caption
Paragraph	Paragraph	Paragraph

Fancy Pictures

212
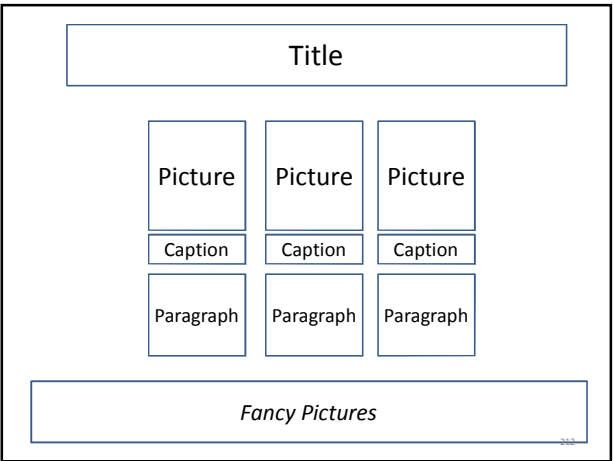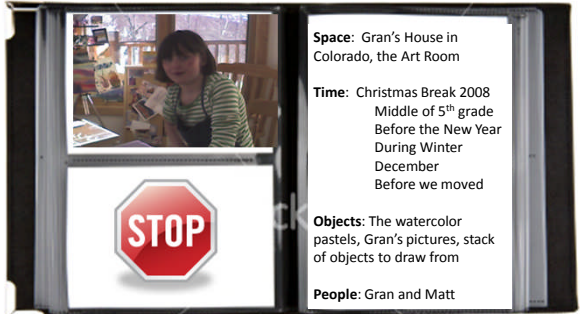
Episodic Memory

Scrapbooking Skills

Space: Gran's House in Colorado, the Art Room

Time: Christmas Break 2008
Middle of 5th grade
Before the New Year
During Winter
December
Before we moved

Objects: The watercolor pastels, Gran's pictures, stack of objects to draw from

People: Gran and Matt

Scrapbooking Skills

Space: Animal Adventures, Bolton, MA, Like a House, Near our Old House

Time: April Vacation, Before Az trip, in the morning, Before I did Science project on Snakes

Objects: Anaconda named "Oprah" weighs 80 lbs.

People: Matt, Young Tour Guide, Matt almost dropped the snake

---

Space:

Time:

Objects:

People:

Same but Different Context?

Emotions?

Space:

Time:

Objects:

People:

Same but Different Context?

Emotions?

Space:

Time:

Objects:

People:

Same but Different Context?

Helping With Novelty

- Label the Features of the New Experience

- Let your Student do the Internet Research

- Verbally Label the STOP features

- Relate these STOP features to a prior experience

Managing Novelty
New Restaurant: Same but Different

- Décor
- Menu
- Typical Kids Menu
- Drive time
- Wait time
- Entertainment

Vacation

Hawaii

Summer on the Cape

Episodic Memory for Small Talk

Same but Different

Same but Different

Family Activities

Camping

Same but Different

On the Dock
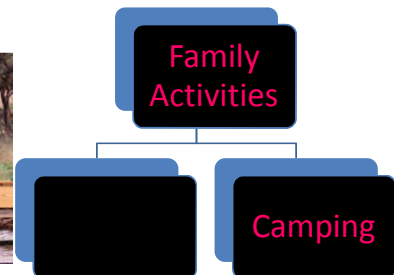
In a Boat
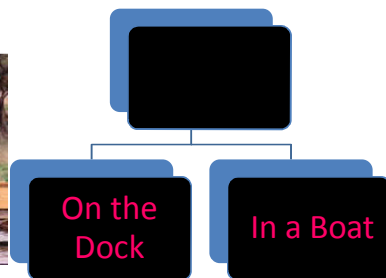
Personal Photo Albums

- Have students bring in pictures printed on 8x11 plain paper of both regular activities and special events
- Begin to have students create a personal scrapbook of their activities
- Have students use these pictures as a means of accessing episodic memories and to begin to learn how to shift from Same but Different

Self Directed Talk

Intrinsic Motivation

Teach Forethought: "Match the Picture", "How do you see yourself?", If…..Then

Talk about Prior Experiences

"Chunk" materials, Point out the Zones

Diet and H2O

Talk Facts

Motivation

Read the Room: STOP

Talk Less

Declare It: Humph

Contact Information

Sarah Ward, M.S., CCC/SLP
Speech and Language Pathologist

www.executivefunctiontherapy.com
swardtherapy@aol.com
Telephone: 781-453-0841

Learning & Memory by Marilee Sprenger

Excerpt Chapter 7. The Lanes Less Traveled: Instructional Strategies for Episodic, Procedural, Automatic, and Emotional Memory

Throughout the school year my students work together on teams. I like this brain-compatible strategy because it helps in classroom management and bookkeeping and adds to students' feelings of security.

As I change units of study, I usually change teams. This provides variety for both the students and me. It also guards against the inevitable hierarchy that develops on all teams (Sylwester, 1997b). If a student feels uncomfortable about a position in the hierarchy, I try to keep that position as short-term and as painless as possible.

After a particularly tough nonfiction unit in literature, I decide the kids need a change, and I form new teams. They enjoy the teams so much that I decide to use these same teams in their language arts classes. The students do not object when they come to this class, and I assign teams to their new seating arrangements. We are studying indirect objects. I am trying to prepare them for a unit test, so I begin the class with a review. The sentences on the board are ready for the students to classify in our usual way. Many of my students look at the sentences on the board as though they were written in another language. They do not know how to classify the sentences. I am outraged! How could they have forgotten? Have they left their brains at home? We have been working on this idea for three days! What is wrong with these students?

The answer, of course, is nothing. It is my mistake. I have stripped my students of their episodic memory of the sentence patterns. Just by changing their placement in the classroom, I was preventing them from accessing certain memories.

I now had a choice. I could either move them back to their original seats or reteach them in their new ones. I chose to reteach the subject matter because I wanted to find out how much time the reteaching would take. It took three days before the students were back at their original skill levels.

The Paths of Least Resistance

Deliberate strategies can access the episodic, procedural, automatic, and emotional memory lanes. Using these strategies when planning a unit can make the information more enjoyable and easier to learn. Keeping in mind that all lanes should be accessed, let's go through each one separately.

Episodic Memory Strategies

Episodic memory is location driven. Studies have shown that if people receive information in a specific location they will more easily remember it in that same location. To use episodic memory effectively may take a little thought, energy, and some creativity.

Bulletin boards may be the easiest place to begin. For each unit covered, create a bulletin board that is unique enough to stand out from all of the others that you have used. Include pictures, posters, and symbols. Examples of how a problem or solution should look may impress your students. Even if you take the bulletin board down before a test, that information may still appear in your students' minds. Several weeks of looking at the board should leave an impression. Although the information becomes "invisible," the learning is stored in the episodic memory.

Changing the arrangement of the desks in your room, including your own, will help you and your students better use the episodic memory lane. Students who sit in the same spot week after week could begin to confuse information. In addition to changing the seating chart, change the arrangement of the students. Perhaps you can change the number of students on a team or put students in pairs. Change the desks or tables from rows to a circle or some other geometric shape. This will help make the material unique to the new look of your classroom.

Accessorize! Wear hats, scarves, belts, shoes, masks, or full costumes to enhance the learning experience. If you are studying the Civil War, find an old Yankee or Confederate cap to wear throughout the unit. Better yet, have each student make a hat to wear. This will make the information memorable and real.

Move out of your room. Perhaps you can use the library or go outside to learn some material. Take field trips. Anything you can do to make the learning unique may make the learning permanent. This may be possible for only very short units.

Use one color of paper for all the handouts related to a unit. This will help your students remember information that was on that color of paper. They will not need to recall anything on the reams of white paper they usually receive. In my English classes I prepare definition sheets using different colors for each unit. I simply remind my students to think about the "yellow" sheets or the "blue" sheets as I ask them to recall.

Teach from a specific area of the room. For each area of study change the location from which you teach. Recalling your location will help students recall the information more readily. They will associate your location with the information you shared.

Episodic memory techniques can do more than help students remember. They can also add to the enjoyment of learning. The brain likes novelty. It is intrigued by it, and it pays attention to it (Jensen, 1996). You will not be overstimulating your students with these changes. Instead, you'll be offering them a better opportunity to remember.

Procedural Memory Strategies

There are two ways to help students access their procedural memory lane. One is to have students perform the material often enough that it becomes a procedure. The other is to set up procedures in your classroom that will create strong memories. Let's look at each way.

When a procedure is repeated frequently, the brain stores it in the cerebellum for easy access. In the past, science was one of the only subject areas that was conducive to this way of storing information. Laboratory procedures were common, and these methods created strong learning experiences. Sometimes, however, even in the science lab, work is not repeated enough to become a procedure. Today, hands-on techniques can be used in many subject areas to provide procedural memories. Math students use manipulatives to develop their conceptual understanding and to solve problems. The problems change, but the procedure for doing them does not. With enough repetition, the students remember the procedure. English students use magnetized labels and follow a process to label each part of speech in a sentence on a magnetized board. Repetition allows them to store this process. This technique is not really any different from fire or earthquake drills. The purpose of such drills is to cement a safety procedure in children's brains—a procedure that may save lives.

You—or your students—can also invent procedures, so that the students will, through repetition, place subject matter into procedural memory (Hannaford, 1995). Try anything that provides movement—for example, role-playing, debate, dance, marches, monologues, and games. Making shadow boxes can enhance procedural memory. Sock-puppet shows can reinforce many concepts in any content area. These procedures not only reinforce semantic knowledge, but they also represent memories that can be stored through those procedural memory "muscles." If you have trouble applying your content to any of these, use your imagination. Have students stand up as you cover specific material. Ask them to walk as you review it, jump when they think they understand a particular point, and clap when they know it all. All of that movement and fun will make a big impression on their brains.

Automatic Memory Strategies

The automatic memory lane stores multiplication tables, the alphabet, the ability to decode words, and dozens of other memories triggered by simple associations. Strategies for accessing this memory lane are simple and fun.

The strategy I highly recommend is music. Putting information to music is simple for students of all ages. They usually find songs easy to remember, and they can then practice the information daily. For years I have had students learn the 48 prepositions, 23 helping verbs, and 18 linking verbs by writing their own songs. They use old, tried-and-true melodies, but they make up the lyrics. It can be as simple as taking "Mary Had a Little Lamb" and replacing all of the words with the list of words the students need to remember. Raps and poems can work as well. It becomes a reflex to fill in the newly learned words when the music begins (Jensen, 1998). I have had students return after high school and tell me they still know their songs.

Other automatic strategies include the use of flash cards, repetition through daily oral work (in math, geography, language, vocabulary, and so on), and oral conditioning (for example, I say "Lincoln," you say "Gettysburg Address"). Each of these strategies has its own benefits. Students will tire of the same strategy, so provide variety. Quiz shows may be a great way to get responses to the automatic level; many students love this technique.

Emotional Memory Strategies

Without a doubt, emotional memory strategies are the most powerful. Many of these strategies also activate other memory storage areas that make them even more powerful. Both positive and negative emotions cause the brain to release certain neurotransmitters that aid in memory retention (LeDoux, 1996). That is not to say you should encourage negative emotions in your classroom, but simply to point out that strong feelings about content can add to emotional memory.

Music can be powerful in emotional memory. Using dramatic music as background while you read or discuss material can make the information meaningful. Playing the theme from "Mission Impossible" or "Dragnet" before you discuss the Battle of Gettysburg will get your students' attention and elicit feelings about the material.

Celebrations are emotional. These can be done with or without music. Plan special celebrations as students learn the material. Have the students present the material to the class through role-playing or a dramatic performance. Give them an emotion that they must try to convey and ask the class to try to recognize it. Find material that contradicts what is said in the text and that calls for debate. This technique can be very effective as students choose sides. Play devil's advocate and speak against the points you cover. Students love the opportunity to prove their teacher is wrong. Either way, it becomes an emotional experience.

Make your room the scene of the crime. If you are studying the Civil War, create the emotions felt in the era. Divide your room in half with a Mason-Dixon line. Separate the students and tell them what possessions they can keep. Allow the emotions to build as some lose their belongings and others receive them.

Most important of all is that you show your enthusiasm for your subject. Model your love of the content, and your students may find it contagious. If you share feelings about what you are teaching, your students may find that they can feel the same way about it.

Accessing Multiple Memory Lanes

The more memory lanes you can reach and teach to, the more successful your students will be in their learning. As this chapter indicates, some strategies can access more than one memory lane. This only makes your job easier. Like anything else dealing with brain-compatible learning, the more aware you are of this information, the easier it will be to use it on a conscious level.

Storytelling is a dynamic way of using multiple lanes. The brain processes parts and wholes simultaneously. Putting semantic information into a story format gives the students the whole idea and the details (Caine & Caine, 1994). Besides the semantic information, emotional memory can be tapped through the conflict or plot of the story. Episodic memory may be reached through the location in which you tell the story and how you dress.

As you plan a unit of instruction, evaluate how much of the material is aimed at the semantic lane. Are there ways you can teach that information through the other lanes? If not, review the semantic strategies described in the previous chapter and choose those that will work well with the content you are teaching.

Next decide how you can create an environment that will engage the episodic memory. What kind of bulletin boards and posters can you use? Do you need to make something? Better yet, can your students make the items to decorate for this "episode"? Are there things that you can wear that will enhance learning? Will your students be able to bring, carry, or wear anything that will make this experience more memorable?

Analyze the material to determine which procedures are built in or which ones you can create. Will the students learn better standing, sitting, or moving in some way? Are there manipulatives for this unit? Can you or your students create a dance or ritual to accompany the learning? One procedure that combines episodic memory with procedural involves making a bulletin board and decorations, and then having the students put them up. This will add information to both lanes.

Think about how you can make some learning automatic. Are flash cards a possibility? What information can be put to music? Repetition is a plus; try to find a way to use it.

Can you make this material emotional? Are there popular songs that might be associated with this material? Ask the students what they know about this new information. This may add to their feelings about it. How will you celebrate the beginning of the unit? How will you celebrate the end? What kind of role-playing or debates can you use to elicit strong feelings?

A novel that I sometimes read with my class is *The Rifle* by Gary Paulsen. This incredible book covers the "life" of a rifle from its creation to the present. The technical parts are difficult to follow; yet those sections are surrounded by a moving story of life and death. When I use this powerful book, I engage my students in the entire production of the unit.

I begin by asking them how they feel about guns and gun control. The answers vary among students, some of whom are beginning to hunt with their fathers. The emotional responses that I receive are steps in the right direction. We discuss drive-by shootings, hijackings, sky jackings, and the latest mass murders at schools. The students are ready to do battle over the issue. I ask the students to bring in any newspaper or magazine clippings that deal with guns. I also ask for pictures of guns.

The students bring in the needed materials to decorate the room. As they enter, I have the song "I Fought the Law, and the Law Won" playing on the boom box. The students smile or chuckle as they listen to the song. They share their information or pictures. Then they place the items around the room. By the end of the class period, the room is decorated, and the students have a basic knowledge of gun control and legislation in the United States. They have also heard some horror stories about accidental deaths and rampages by people with guns.

The next day the students choose a slip of paper from one of two piles. Half the slips say "Guns kill people." The other half say "People kill people." The students who choose "Guns kill people" sit on one side of the room. The others take the other side. I hand out the novels, and the reading begins.

So far the episodic, procedural, and emotional lanes have been activated. Playing the song each day as the students enter will trigger memories of this information.

As we read, we encounter the technical information and terms involved in building a rifle. To make this more meaningful for the students, I must discover a way for them to understand the process. We cannot build a gun ourselves because weapons or replicas are not allowed in school. We can draw. I provide paper, dictionaries, and encyclopedias. Informative Web sites on the Internet can be helpful here, too. As the novel describes the building of the rifle, we draw our own pictures in stages. We talk about the procedures used, laugh about some of them, and act out a few.

As the reading continues, we discover that the rifle passes through the hands of many people in the story. We begin to create a story map on the board. Each section has a picture of the new owner, along with a description of the person and an explanation of how he received the rifle.

Some days I ask students to come to the front of the room. I give each of them a sign to wear with the name of one of the rifle owners or another character in the story. The students discuss the order in which the owners should stand, and then one or several students retell the story. They pass a picture of the rifle from owner to owner. Other days I hand the picture to a student and say, "You are the builder of the rifle. Who are you?" Then the student gives the rifle to another student and says, "I sold the rifle to you. Who are you?" This continues until we come to the current owner. I give written quizzes occasionally to test the learning.

By now I have activated emotional, procedural, episodic, and semantic memories. With repetition of things like the names of the owners of the guns, students have some information in automatic memory.

At this point, I ask the students to create a song about the story. They can use the tune from "I Fought the Law" or compose one of their own. I assign this to each group, so that we will have only two songs when we finish. The songs should be very different, and they are. The students begin to sing their songs each day after class begins. The songs are full of information from the story.

When we reach the end of the story, most students are very emotional about the events leading up to the ending and the ending itself. Again, we have reached a technical area of the story. I need a way to help them understand. We reenact the scene. Students volunteer to be characters from the story. We create signs with names on them. One student becomes the rifle itself, and another becomes the bullet. The rifle shoots, and the bullet follows the path described in the book. The role-play is not perfect, but it appears to work. Many students are fascinated by the physics involved in the bullet's path.

As the unit culminates, I ask the students if they are still comfortable in their chosen groups. Many stay where they are. Some switch sides. They ask for debates. They spend the next several days preparing. We hold the debates, and the students discover the importance of preparation and evidence.

The final activity is a persuasive essay using the group titles as the argument. The unit ends. The students return to their previous seats. The posters, pictures, and articles are returned. Most students appear to have enjoyed the experience.

I had to use conscious effort to access all of those memory lanes. The unit became more interesting as I did so. The students were involved and happy. Each year I must add some units and change others to access all of the memory lanes. It can be a challenge, but the rewards are worth it.

Many of you have been creating units for years that access the various memory lanes. Brain research encourages us to enrich our teaching strategies. Knowing this information may enlarge your bank of teaching strategies. Use the strategies that fit your style.

When I started teaching in 1971, I didn't have a style. Even though I had fun teaching and my students were learning, I did not have a clue about what I should be doing. Through the years I have taken classes, attended workshops, and read hundreds of books as I searched for a style that would fit me. It took a long time to find a style that allowed me to feel satisfied that I was doing the job I wanted to do. There are days when I want to tear my hair out and throw in the towel. When I give myself the chance to step back and look at what I am doing, I usually see that I have slipped back into my old patterns—you know, the ones that I used repeatedly and expected different results from. I find that when I return to my brain-compatible methods, both my students and I feel successful.

Episodic memory and children with ASD - part 1

Linda Murphy - Boston Autism & Parenting Examiner

Memory is important for everyone in terms of learning, growing and managing more complex social and emotional situations in life. We use our memories to build and strengthen relationships, to reflect on what we've done in order to make plans for the future, and to problem solve based on past experiences. If we didn't have memories to draw from, we would hardly move forward in life. Developing meaningful memories is a critical skill for all people, including children with autism.

Imagine this: you spend the day in Boston with a friend. You take the T there, walk around Faneuil Hall, do a little shopping on Newbury Street, have lunch in the North End and visit the Swan Boats in the Public Garden. In that one day, the memories formed and memories used span a variety of topics. You probably remember the things that you talked about with your friend, or the laughter that you shared, more than you remember any particular item that you looked at while shopping. Or you probably remember how good your meal tasted, but maybe not the other items that were listed on the menu. Maybe when you got to the Swan Boats there was a line and you used your memories of waiting in other lines to appraise how long you might need to wait in this line. Each of these memories is an example of episodic memory.

Episodic memory refers to one's autobiographical memory. As we move and do things throughout our life, we are creating a story about ourselves. We use this self narrative to share our experiences with others and to negotiate new situations in the future. Without memories to pull from, the world would be a scary place; any new situation would leave us feeling lost. With episodic memory, we can enter a new situation and figure out what to do because we remember a similar situation from our past.

Now imagine you took that same trip to Boston with a child who has ASD. His memories may instead be the names of the T stops you rode through, how loud the restaurant was, and the anxiety he felt waiting in line to go on the Swan boats because he didn't know how long he was going to have to wait. What is meaningful moment to moment to a child with ASD may be different from what is meaningful to another person. Instead of forming memories that will later help with problem solving and planning, a child with ASD may be forming memories that lead to fear of the unknown. Developing episodic memory is difficult for people with autism, yet it is a critical skill needed for living an independent, happy and stress free life.

Episodic memory and children with ASD - part 2

Linda Murphy - Boston Autism & Parenting Examiner

In a previous article, the critical role that episodic memory plays in life and in developing social relationships was discussed. This second part in the series will discuss how to help your child develop and use episodic memories for the purpose of experience sharing.

One of the biggest shifts that social partners need to make in order to support a child with ASD to develop and access episodic memories is in their own communication. Often times when we

are trying to help children access memories, we ask a lot of questions or use imperative statements: Who did you play with at school today? What did you have for snack? Tell Daddy what movie we saw. It goes on and on. We try so hard to get information from kids with ASD. Sometimes we get it, sometimes we don't, and even when we do get an answer to our question, we are not getting at what we truly want to know. Don't we instead want to know how that child felt throughout the day? What made that child smile or laugh? About connections the child shared with her friends? We want more than a one word answer, but don't know how to get it. One thing is clear though: imperative questions and statements do not get at the heart of what we all use memories to do: *share who we are!*

Because we don't always know what a child with ASD is remembering about an event - he may remember the ceiling fan that he watched, or the numbers he noticed on the outside of a house - we have to mindfully spend time helping socially meaningful memories go in. We can do this using declarative language to observe, reflect and share subjective appraisals alongside the child. We can do this by becoming generous with information. This means we are sharing and not expecting anything in return. We are moving from getting to giving so that the child can truly learn to give back.

Once we have done this - once we are sure we have spent time giving - we can engage children in specific activities that support them to share what they remember. Here is one such activity:

Share memories in partnership with the child. This means, you are collaborators in the task of weaving a story. It is important to do this within a context where you were present so that you can truly support the child to succeed. Let's go back to our trip to Boston to illustrate this idea. As you are on that trip, offer information along the way that not only recaps what you are doing, but communicates a subjective appraisal: "Wow! I can tell you really liked riding on the T. I think Park St. is your favorite stop"… "Oh look! There's a line for the Swan Boats, but it isn't that long. Let's wait because I think it will move quickly" … "You really like pizza! We should go to the North End because that's where the best pizza in Boston is." While on this trip, you could also easily take snapshots with your phone or PDA, capturing moments of the child in action, moments that are socially meaningful. Once your trip is complete, you remember and recap as a team. Maybe you look at the pictures together while riding home on the T, or do it as a bedtime activity. You continue to share what *you* remember using components that make storytelling more interesting and fun for everyone: animated facial expressions, rich intonation, gestures, and dramatic pauses. Here and there give space for your child to chime in, or even to just communicate that she remembers too. This is how sharing of memories begins.

As a team, you could later tell a family member or friend about your day. You share some memories, and pause to see if your child wants to add a related memory. Your memories are triggering hers, and she may add a thought when you invite her to do so. You may even scaffold an idea for her: "We went on the T and stopped at your faaaaaavorite stop …." Or maybe you say, "We decided to eat in the North End *because*…." and your child chimes in: "I love pizza!"

These kinds of memories are so much more meaningful than simply stating the details. By sharing in this way, we are teaching children to share what each detail means to them on a very personal level. We are teaching them to share who they are.

Episodic memory and children with ASD - part 3

Linda Murphy - Boston Autism & Parenting Examiner

Any time we are faced with a difficult situation, or if something keeps us from doing what we are planning to do, we come to a crossroads. We think: What should I do next? What are my choices? How does one option compare to another? This can include big problems, such as what to do after losing a job, but it also comes into play in the small decisions we make day to day. For example, when driving to work, what route do we take? If there is a traffic jam, do we take a different route? How do we decide? Or, if an item breaks, how do we decide whether to fix it or throw it away? If we decide to fix it, how do we do it? New batteries? Scotch tape? Glue? There are so many decisions we make moment to moment based on what we know about possible outcomes. Furthermore, we make most of these seemingly small decisions in a calm, deliberate manner, and don't expect perfection. We know that often, good enough is okay. So much of what we do depends on our subjective appraisal, and our subjective appraisal is based on our previous experiences, or episodic memory.

Now, let's think about children with autism. Often, problems are addressed when they are at crisis level. If we go back to our trip to Boston: maybe the child is screaming because he was planning to take the T and it has broken down. Or, maybe he is expecting to go to a particular restaurant in the North End, but it is closed for renovations. Maybe he lost his souvenir from the Swan Boats. In these moments, when expectations are not met, a child with ASD has trouble coping and emotions escalate. We may then address the particular problem by writing a social story, creating a behavior plan, or explaining to the child why it is not a big deal. These strategies can certainly help, but they are reacting to a particular problem rather than proactively teaching kids how to cope with the unexpected in life.

We can help our kids with ASD become on-line problem solvers by including them in our own problem solving opportunities day to day, when there is no crisis, around events that are not emotionally charged. Using declarative language, we can invite children to understand how we are thinking as we approach a problem. We can model how we are not looking for the perfect solution, but are satisfied with good enough. As we include children in these moments, we are building their episodic memory around managing challenging situations. We are mindfully helping them form memories by including them in moments they may have otherwise missed. Then, when a similar but different problem comes their way in the future, we can help them pull memories from our shared experiences: "Oh! Your toy isn't working. Hmmm… I remember when my watch stopped working. We figured out it just needed new batteries. Let's see if your toy needs new batteries." Or, "Oh – you can't find your doll. Hmmm … I remember last week when I lost my wallet. That was scary! But after we retraced my steps, we found it in the car. Let's see if we can retrace your steps."

It is important to remember that building episodic memory is a process that unfolds. It does not happen overnight, but as we see children with ASD use their episodic memories to problem solve, there is no doubt it was worth the wait.

Episodic memory and children with ASD - part 4

As discussed in previous articles, episodic memory is the story we create about ourselves over time. We may use this story to share ourselves with others, or we may use this story to form a plan of action when faced with a problem. We need our memories to assign meaning to events in our lives, and to negotiate new situations in the future.

As children form relationships with their peers, they use their episodic memory to create stories of developing friendships, as well as narratives of themselves as desirable play partners. This is a process that unfolds over time, as children have repeated opportunities to play with others in increasingly dynamic situations. Early on in peer interactions, all children are concerned with the immediate gratification that comes from events such as going first, playing what they want to play, winning a game, and using a toy when they want to use it. However, as children get practice in the realm of peer dynamics, they come to observe unwritten rules and subtle yet ever present patterns: Sometimes I win, sometimes my friend wins. Sometimes I go first, but sometimes my friend does. Sometimes we play what I want to play, but sometimes we play what my friend wants to play. I can use a toy that I want to use, but it is also important to take turns and share. Parents and teachers help to teach these lessons both directly and indirectly, and over time children come to trust that, even though they did not get to go first this time, they will probably get to go first another time. Or even though their game was not chosen this time, it will most likely be chosen in the near future.

Because children with ASD may not easily notice the unwritten patterns of turn taking over the course of time, these lessons are much harder to learn. They may be quite good at noticing and understanding turn taking within a structured game in the here and now, but patterns over a longer period of time are more elusive. What children with ASD do notice, however, is when their preference is not honored because this has strong personal meaning to them in the moment. When this happens, we may see a big, negative reaction that leads all involved to form unpleasant memories. Subsequently, no one wants to rock the boat again and we may tread lightly or even avoid teaching those vital friendship skills of flexibility and fairness simply for the sake of keeping the peace.

So, how do we teach these vital peer interaction skills in a way that is not so unpleasant for everyone? For those of you following this series, the answer will be a familiar one: Use declarative language to mindfully make explicit memories that are easily perceived by most, demonstrate how we can use these memories to inform our decision at hand, and engage our kids with ASD in this decision making process.

Here are some examples from our trip to Boston:
• Hmmmm… Freddie got to sit by the window on our last ride on the T, so I think it would be fair if we let Annie have the window for this ride.
• I know that Trixie was first in line for the Swan Boats, so I'm thinking that it would probably be fair to let Lucy be first in this line.
• I remember yesterday Christopher got to choose which dessert we would share, so hmmm… I'm wondering what might be fair today...

Once these patterns are spotlighted, children learn to self narrate and notice more implicit turn taking opportunities over time. They learn to talk themselves through turn taking that is outside of a particular game, the type of turn taking that is woven throughout life and friendships. They can and do rise to the occasion and become fair decision makers because they now understand and trust the process.

But, if we don't make a point of helping them notice and subsequently form these memories along the way, they become stuck in the moment at hand, the moment of crisis, the moment when they panic because the thing they want to do is not going to happen. We have to give them information as it happens and mindfully help them recap so that they can learn how to give back as a true friend.

Recommended Reading on Executive Function Skills and Related Disorders
by Sarah Ward, M.S., CCC/SLP

No Mind Left Behind: Understanding and Fostering Executive Control--The Eight Essential Brain Skills Every Child Needs to Thrive by Adam J. Cox

- *One of my favorite books about the Executive Function Skills. Well written, comprehensive and full of practical strategies. His website is amazing too: www.dradamcox.com*

Executive Skills in Children and Adolescents: A Practical Guide to Assessment and Intervention 2 nd Edition (Practical Interventions in the Schools) by Peg Dawson and Richard Guare

- *A good introductory book on Executive Function Skills. Particularly excellent for teachers and parents who need foundational understandings on what the Executive Function Skills are. The Second Edition has lots of additional information and updates.*

Tools of the Mind: The Vygotskian Approach to Early Childhood Education (2nd Edition) by Elena Bodrova and Deborah Leong

- *This book is my absolute favorite for understanding how executive function skills develop in young children. Several chapters are dedicated to an outstanding approach to teaching writing to young children. Writing can be a real struggle for kids with executive function based deficits and this technique is extremely helpful. This book also addresses the value of teaching play skills as a means of learning self regulation, delayed gratification and tolerance for frustration.*

7 Things Your Teenager Won't Tell You and How to Talk About Them Anyway by Jennifer Lippincott and Robin Deutsch

- *I consider this mandatory reading for parents of teenagers. Don't let the title of the book prevent you from buying this book. It is not about how to talk to your teen about drugs, etc. The concrete advice provided for talking with and parenting teenagers are simple and highly effective. More importantly the approaches work towards developing the teenager's ability to be a strong independent, smart thinker while still keeping themselves safe and respectful. This book has a goldmine of information.*

Raising a Thinking Preteen: The "I Can Problem Solve" Program for 8- to 12- Year-Olds by Myrna B. Shure and Roberta Israeloff

- *This book focuses heavily on teaching students how to develop flexible problem solving skills. This is one of the few books I have read that does not merely say 'problem solving is an important skill' but rather truly teaches the reader "how to" teach children the steps to being independent problem solvers.*

Recommended Reading on Executive Function Skills and Related Disorders
by Sarah Ward, M.S., CCC/SLP

Lost in School, by Ross Green.

- *An excellent book for communicating to school professionals about the underlying EF difficulties children with behavioral challenges experience and why they act the way they do. A must read for teachers and parents alike.*

Fostering Independent Learning: Practical Strategies to Promote Student Success by Virginia Smith Harvey and Louise Chickie-Wolfe

- This has many practical strategies to improve study habits, time management, organization, writing and reading comprehension skills. An excellent book for teachers and tutors alike, the strategies are very metacognitive in nature and demonstrate how to move the student from dependence to independence.

Strategies for Organization: Preparing for Homework and the Real World by Michelle Garcia Winner

This 3.5 hour DVD and handout booklet features the highlights of Michelle's popular all day workshop on this same topic. The information on this DVD is applicable to teaching and treating ALL students, not just those with learning disabilities, and is best for those in 4th through 12th grade. It is an excellent resource!

Study Skills: Research Based Teaching Strategies by Patricia Newhall. Landmark Outreach Program.

Promoting Executive Function in the Classroom by Lynn Meltzer

- A must for all teachers interested in improving executive function skills in the classroom. Has many practical strategies to improve classroom organization, note taking, studying, emotional self-regulation and task management.

Why Don't Students Like School? By Daniel Willingham

- This book does a wonderful job of clearly explaining how working memory operates and how to teach academic content which will be retained in working memory to then be transferred and used by long term memory.

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Thinking About You Thinking About Me 2nd Edition by Michelle Garcia Winner

- This is a must have book to understand social interaction and social awareness. Many students, including those with high-functioning autism, Asperger syndrome, ADHD and similar social and communication challenges, have difficulties understanding that other people have perspectives that are different from their own. Michelle's model of perspective-taking makes research into Theory of Mind practical for teaching these students and even students who may be considered "neurotypical." Specific lessons, and how to apply them in different settings, are explored. The assessment chapter now includes the Social Thinking Dynamic Assessment Protocol®, with more detailed assessment techniques.